Water Quality And Oceanographic Data Near A Deep Water Outfall Discharging Acid Mine Drainage From Britannia Mine Into Howe Sound, British Columbia

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WATER QUALITY AND OCEANOGRAPHIC DATA NEAR A DEEP WATER OUTFALL DISCHARGING ACID MINE DRAINAGE FROM BRITANNIA MINE INTO HOWE SOUND, BRITISH COLUMBIA

by

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ABSTRACT

Varela, D.E., K.L. Barry, M. Guo, G.E. Piercey, N.M. Mehlenbacher, P.J. Harrison, and C.D. Levings. 2000. Water quality and oceanographic data near a deep water outfall discharging acid mine drainage from Britannia Mine into Howe Sound, British Columbia. Can. Data Rep. Fish. Aquat. Sci. 1063: 43 pp.

Data are presented from an oceanographic and water quality sampling program conducted near Britannia Creek, B.C., to assess the impact of acid mine drainage from an outfall of an abandoned mine. Sampling was conducted on April 30, July 22-23, and November 4 and 13, 1999, at nine sites positioned around the outfall at the Britannia Creek estuary and at three reference stations at the Furry Creek estuary. To assess water quality, pH, and dissolved copper were measured. Physical oceanographic measurements included vertical profiles of temperature, salinity, and irradiance. Chemical and biological measurements took place at three depths: surface, pycnocline, and below the pycnocline. Nitrate, phosphate, and silicic acid were measured and phytoplankton were identified. Phytoplankton abundance was assessed by measuring relative fluorescence and chlorophyll *a*. Primary productivity was determined by measuring uptake rates of carbon 14 from water samples incubated in the laboratory under full spectrum light. Zooplankton biomass and species composition were also determined.

RÉSUMÉ

Varela, D.E., K.L. Barry, M. Guo, G.E. Piercey, N.M. Mehlenbacher, P.J. Harrison, and C.D. Levings. 2000. Water quality and oceanographic data near a deep water outfall discharging acid mine drainage from Britannia Mine into Howe Sound, British Columbia. Can. Data Rep. Fish. Aquat. Sci. 1063: 43 pp.

Nous présentons les données recueillies au cours de travaux d'océanographie et d'étude de la qualité de l'eau menés près du crique Britannia (Colombie-Britannique) pour évaluer l'impact du drainage acide issu de l'émissaire d'une mine abandonnée. Les échantillonnages ont eu lieu le 30 avril, les 22-23 juillet, le 4 et le 13 novembre de l'année 1999, à 9 sites répartis autour de l'émissaire, à l'embouchure du crique Britannia, et à 3 stations de référence situées à l'embouchure du crique Furry. Pour évaluer la qualité de l'eau, nous avons dosé le pH et le cuivre dissous. En océanographie physique, nous avons mesuré les profils verticaux de la température, de la salinité et de l'éclairement énergétique. Les mesures chimiques et biologiques ont été effectuées à trois profondeurs: à la surface, à la pycnocline et sous la pycnocline. Nous avons mesuré le nitrate, le phosphate et l'acide silicique, et identifié le phytoplancton. Pour évaluer l'abondance du phytoplancton, nous avons mesuré la fluorescence relative et la chlorophylle *a*. Pour la productivité primaire, nous avons mesuré les taux d'absorption du carbone 14 d'échantillons d'eau incubés en laboratoire sous éclairage en spectre continu. De plus, nous avons évalué la biomasse zooplanctonique et établi la composition spécifique.

INTRODUCTION

The Britannia Copper Mine, located approximately 50 km north of Vancouver, B.C., operated from 1904 to 1974. A byproduct of mining has been the continued generation of acid mine drainage (AMD) from Britannia Mine which is characterized by low pH and high levels of dissolved metals, especially copper and zinc. An extremely large flow of AMD can be generated from Britannia Mine since the open pits trap rain and snow, funneling large amounts of water through the extensive system of underground mine workings.

Acid mine drainage from Britannia Mine is considered to be the worst point source of pollution of any mine in British Columbia (McCandless 1995), being the largest source of dissolved metals into Howe Sound (Dunn et al. 1992). There are two point sources of Britannia AMD into Howe Sound: (1) the 2200 foot (ft.) portal (a surface entrance to the mine located 2200 ft. from the top of Mt. Shear, 700 metres (m) above sea level) which drains indirectly into Howe Sound via Britannia Creek, and (2) the 4100 ft. portal (67 m above sea level) which is an underwater pipeline that releases AMD directly into Howe Sound from an outfall located 30 m in depth, approximately 70 m from shore. Discharge from the 4100 ft. portal usually forms a neutrally buoyant plume which is thought to remain trapped below the pycnocline during the summer months (Chretien 1997). However, this effluent could be detrimental to organisms inhabiting depths below the pycnocline as well as to organisms throughout the water column when stratification is absent. Chretien (1997) showed that this effluent is toxic to phytoplankton in laboratory studies but there are no comparative field studies on pelagic ecosystem effects. One of the effects of AMD contamination could be a reduction in primary production (Stockner *et al.* 1977), which could have serious implications for other components of the food web in Howe Sound. For example, feeding and growth of juvenile chum salmon (*Oncorhynchus keta*) and chinook salmon (*O. tshawytscha*) migrating through Howe Sound may be affected by decreased productive capacity due to poor water quality from Britannia Mine discharges.

This project took place in 1999 to assess the effects of AMD from the 4100 ft. outfall on aquatic organisms in Howe Sound. This report presents a summary of data collected to compare water quality, phytoplankton, and zooplankton abundance, and primary production near the 4100 ft. discharge at the Britannia Creek estuary to that at an unpolluted area (Furry Creek estuary) in Howe Sound.

MATERIALS AND METHODS

The Britannia Mine water quality study was conducted during three sampling periods relative to the freshet from the Squamish River: (1) pre-freshet (April 30, 1999), (2) during freshet (July 22 and 23, 1999), and (3) post-freshet (November 4 and 13, 1999). Sampling took place in two areas in Howe Sound, at the Britannia Creek

estuary and at the Furry Creek estuary, a reference area located approximately 5 km south of Britannia Creek (Fig. 1). Nine stations (BB1 to BB9) were located near the mouth of Britannia Creek, around the outfall, which was marked by a buoy (Fig. 2). Sites were located in a grid around the outfall with BB1 positioned above the outfall. Three reference sites (FC1 to FC3) were located near the mouth of Furry Creek (Fig. 3). Site locations were geo-referenced with a Trimble Pro-XR receiver and TDC2 Asset Surveyor dGPS (real time differentially-corrected Global Positioning System). Site locations and depths are specified in Table 1.

PHYSICAL MEASUREMENTS

Vertical profiles of temperature, salinity, and density were measured with a InterOcean Systems Inc. Model S4 Current Meter No. 050 1057 on April 30, July 22, and November 4, 1999. Measurements were performed from the surface to the bottom for the shallow sites (BB1 to BB6, and FC1 to FC3) and to a minimum of 50 m for the deeper sites (BB7 to BB9). These results are presented in Table 2 which, due to its large size, is provided on a floppy disk in this report.

Vertical profiles of underwater light intensity were measured with a Licor Model LI-1000 Quantum sensor (calibrated for use in water) at selected sites: BB1, BB4, BB7, and FC1 on April 30; BB1, BB2, BB7, and FC2 on July 23; and BB1, BB4, BB7, and FC1 on November 13, 1999. These results can be found in Table 3.

CHEMICAL AND BIOLOGICAL MEASUREMENTS

Sampling took place at all sites on April 30, July 23, and November 13, 1999, at three depths: surface, pycnocline, and deep (below the pycnocline). Water was collected with NIO (1.2-L) sampling bottles and transferred to acid-cleaned 1-L containers. Sub-samples were collected from the 1-L containers for the measurement of *in vivo* fluorescence, pH, dissolved macronutrients (nitrate, phosphate, and silicic acid), chlorophyll *a*, dissolved copper, phytoplankton identification, and carbon uptake rates by phytoplankton.

Additional water samples for *in vivo* fluorescence and pH were also collected at intermediate depths in order to obtain more detailed vertical profiles of these parameters. *In vivo* fluorescence and pH were measured with a Turner Designs™ (Model 10) fluorometer and a Corning pH/ion analyzer (Model 350), respectively. These results are presented in Table 4.

Water samples for dissolved nitrite (NO_3^-), silicic acid ($Si(OH)_4$), and phosphate (PO_4^{3-}) were obtained from the three depths and filtered through pre-combusted Whatman® (GF/F (0.7 µm nominal porosity)) filters into 30-ml containers and stored at -20°C until analysis using a Technicon® Autoanalyzer II. Nitrate was measured following the automated procedure of Wood *et al.* (1967). Silicic acid and PO_4^{3-} were measured following the procedures of Armstrong *et al.* (1967) and Hager *et al.* (1968),

respectively. Minor modifications to the automated methods are described in Barwell-Clarke and Whitney (1996).

Samples for chlorophyll *a* (Chl *a*, 200-300 ml) were obtained from the three depths and filtered onto Whatman® GF/F filters using a vacuum pressure of < 125 mm Hg, and stored at -20°C in a desiccator until analysis. Chlorophyll *a* was extracted with 90% aqueous acetone, sonication and subsequent storage in the dark at 4°C for 24 h. Chlorophyll *a* concentrations were measured using *in vitro* fluorometry with a Turner Designs™ Model 10 fluorometer (Yentsch and Menzel 1963) as outlined by Parsons *et al.* (1984).

Dissolved copper concentrations were measured from surface, pycnocline, and deep water samples. At each site, a 50-ml water sample was removed from the NIO sampler with a syringe and filtered through a 0.45-µm sodium acetate Sartorius filter in a filter housing. Each sample was immediately preserved with 1 ml of analytical grade concentrated nitric acid. Samples were held at ambient temperature until analysis. All apparatus, except the previously acid-washed sample bottle, was rinsed with deionized water, and then with water from the sample location prior to sampling to avoid cross-contamination. Single element analysis of copper was measured using Graphite Furnace Atomic Absorption Spectrometry (GF-AAS). The sample was dried, charred to remove organics and other components, and then atomized. Copper was quantified by measuring the intensity of the transmitted radiation, and applying a Deuterium lamp background correction system (Environment Canada 1998). In addition, samples of deionized water that were passed through the syringe, filter, and filter housing apparatus as well as nitric acid, were submitted for chemical analyses to ensure quality assurance/quality control in the field. Nutrients, chlorophyll *a*, and dissolved copper concentrations are presented in Table 5.

Water samples for carbon uptake rate (primary productivity) experiments were obtained at each site from the surface only. Three surface sub-samples were transferred to 70-ml polycarbonate bottles and stored at 4°C until inoculation with a C-14 stock in the laboratory. Samples were inoculated with 100 µl (ca. 8.3 µCi) of a working stock of sodium bicarbonate ($Na_2{}^{14}CO_3$). Immediately after inoculation, samples were incubated for 2 to 3 h under ambient temperature conditions (9°C in April, 12°C in July, and 10°C in November) and saturating irradiance (ca. 160 µmol photons m^{-2} s^{-1} each month). After incubation, samples were filtered through precombusted Whatman® GF/F filters and placed in separate scintillation vials. After 24 h of the addition of a liquid scintillation cocktail to each vial, the counts per minute (CPM) from each sample were measured in a Beckman Liquid Scintillation Counter Series LS-6000. Counts per minute were converted into disintegrations per minute (DPM) and carbon uptake rates were calculated as outlined by Parsons *et al.* (1984). These results can be found in Table 6.

Samples for phytoplankton analysis from the three depths were collected in 125-ml glass flasks and fixed with acidified Lugol's iodine solution (Parsons *et al.*

1984). Phytoplankton were identified to genera using the inverted-microscope method (Utermöhl 1958). Phytoplankton codes are listed in Table 7 and phytoplankton identifications are presented in a presence/absence table (Table 8).

Samples for zooplankton biomass and identification were obtained for sites BB1, BB8, and FC1 on April 30, July 22, and November 3, 1999. Samples were obtained from duplicate vertical net hauls from 20 to 25 m to the surface for sites BB1 and FC1, and from 50 m for site BB8 to the surface with a bongo net with a mouth of ca. 0.62 m and a mesh size of 202 µm. The filtration efficiency of the net was considered to be 95% (after Bornhold 2000). The total volume filtered was related to the area of the mouth, the depth sampled, and the filtration efficiency of the net as follows:

$$\text{Volume filtered } (m^3) = \Delta \text{ depth} \times \pi r^2 \times \text{filtration efficiency.}$$

Since each bongo haul collects two samples, duplicate tows provided four samples, three of which were used for zooplankton biomass measurements and one for zooplankton species identification. To determine zooplankton biomass (dry weight per m^3), samples were filtered through Nitex netting (202 µm mesh size) using vacuum pressure, weighed, and dried at ca. 60°C for 48 h. Once the drying was completed, the samples were re-weighed. The dry weight per m^3 was estimated using the water volume filtered as calculated with the formula above and these results are provided in Table 9. Samples for zooplankton identification were fixed with concentrated buffered formalin to a final concentration of 5 to 10%. Zooplankton were stained with Rose Bengal and identified using a Wild M5 Stereomicroscope. At least 200 individuals were identified from each sample. Table 10 contains the zooplankton codes and Table 11 provides the numerical abundance of various types of zooplankters.

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Figure 3. Location of sampling sites near Furry Creek estuary.

Table 1. Locations (UTM, NAD-83, Zone 10) and total depths of each sampling site at Britannia Creek estuary (BB) and Furry Creek estuary (FC), Howe Sound.

Site	Northing	Easting	Total depth (m)
BB1	5497009	484960	30
BB2	5497211	484854	48
BB3	5496906	484983	12
BB4	5497021	484981	12
BB5	5497233	484967	12
BB6	5496925	485035	<10
BB7	5496987	484721	75
BB8	5497173	484581	107
BB9	5496850	484708	96
FC1	5492299	483398	31
FC2	5492527	483413	30
FC3	5491969	483375	33

Table 2. Depth profiles of temperature, salinity, and water density at each site during each sampling period.

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density ($kg \cdot m^{-3}$)

"Data can be found on diskette at the back of this report"

Table 3. Depth profiles of light intensity at selected sites at Britannia Creek estuary (BB) and Furry Creek estuary (FC). Dash indicates no sample.

Date (yyyymmdd)	Depth (m)	Irradiance (µmol photons · m^{-2} · s^{-1}) BB1	BB2	BB4	BB7	FC1	FC2
19990430	Air	1300	-	1180	1030	182	-
19990430	0	740	-	388	300	82	-
19990430	1	630	-	206	212	55	-
19990430	2	300	-	135	181	39	-
19990430	3	260	-	109	155	34	-
19990430	4	217	-	83	120	18	-
19990430	5	172	-	74	89	12	-
19990430	6	140	-	54	70	12	-
19990430	7	100	-	-	55	10	-
19990430	8	64	-	-	53	8	-
19990430	9	42	-	-	36	6	-
19990430	10	31	-	-	23	5	-
19990430	12	14	-	-	17	3	-
19990430	14	5	-	-	5	1.5	-
19990430	16	3	-	-	3	0.8	-
19990430	18	1.3	-	-	1.9	0.5	-
19990430	20	0.91	-	-	0.9	0.2	-
19990430	24	-	-	-	0.2	-	-
19990430	Air	1400	-	1025	900	194	-
19990723	Air	2200	1650	-	2000	-	1200
19990723	0	940	1200	-	1300	-	650
19990723	1	340	406	-	270	-	236
19990723	2	108	156	-	83	-	57
19990723	3	47	53	-	47	-	30
19990723	4	28	20	-	31	-	16
19990723	5	17	17	-	20	-	13
19990723	6	11	10	-	15	-	6
19990723	7	9	8	-	11	-	3.9
19990723	8	7.5	7	-	10	-	3.1
19990723	9	6.8	5.8	-	8	-	2.4
19990723	10	5.9	4.3	-	6.4	-	2
19990723	12	4.6	3.7	-	4.5	-	1.4
19990723	14	3.7	3	-	2.6	-	0.8
19990723	16	2.9	2.0	-	2.5	-	0.5
19990723	18	-	1.6	-	2.2	-	-
19990723	20	2.2	1.4	-	1.7	-	-
19990723	25	-	1.1	-	1.5	-	-
19990723	Air	-	-	-	-	-	-
19991113	Air	187	-	191	182	148	-
19991113	0	91	-	86	84	65	-
19991113	1	34	-	58	38	26	-

Table 3 (continued).

Date (yyyymmdd)	Depth (m)	Irradiance (µmol photons · m^{-2} · s^{-1})					
		BB1	BB2	BB4	BB7	FC1	FC2
19991113	2	22	-	26	24	14	-
19991113	3	14	-	17	14	8.0	-
19991113	4	10	-	12	9.6	5.2	-
19991113	5	8.2	-	9.3	7.5	4.5	-
19991113	6	6.1	-	6.7	5.8	3.1	-
19991113	7	4.6	-	5.0	4.5	2.5	-
19991113	8	3.6	-	3.5	3.4	1.7	-
19991113	9	2.5	-	2.6	2.6	1.5	-
19991113	10	1.9	-	1.9	1.7	0.9	-
19991113	12	1.3	-	-	1.5	0.7	-
19991113	14	0.7	-	-	1.0	0.5	-
19991113	16	0.6	-	-	0.7	0.2	-
19991113	18	0.4	-	-	0.5	0.1	-
19991113	20	0.4	-	-	0.3	0.1	-
19991113	Air	-	-	-	-	-	-

Table 4. Fluorescence and water pH from various depths at each site.

Date (yyyymmdd)	Site	Depth (m)	Water layer	Fluorescence	pH
19990430	BB1	0	Surface	0.48	7.92
19990430	BB1	2	-	0.70	6.98
19990430	BB1	4	Pycnocline	0.78	7.84
19990430	BB1	6	-	0.92	6.95
19990430	BB1	15	-	0.90	6.97
19990430	BB1	20	Deep	0.52	7.79
19990430	BB1	25	-	0.50	7.07
19990430	BB2	0	Surface	0.90	7.77
19990430	BB2	2	-	0.54	7.34
19990430	BB2	4	Pycnocline	0.90	7.76
19990430	BB2	6	-	0.64	7.39
19990430	BB2	15	-	0.92	7.38
19990430	BB2	20	Deep	0.85	7.70
19990430	BB2	30	-	0.32	7.35
19990430	BB3	0	Surface	0.50	7.40
19990430	BB3	2	-	0.56	7.25
19990430	BB3	4	Pycnocline	0.66	7.41
19990430	BB3	6	-	1.35	7.08
19990430	BB3	10	Deep	0.80	7.46
19990430	BB4	0	Surface	0.46	8.05
19990430	BB4	3	Pycnocline	0.33	8.08
19990430	BB4	6	Deep	1.05	7.92
19990430	BB5	0	Surface	0.56	8.01
19990430	BB5	2	-	0.65	6.73
19990430	BB5	4	Pycnocline	0.50	8.01
19990430	BB5	6	-	1.26	6.76
19990430	BB5	10	Deep	0.90	7.80
19990430	BB6	0	Surface	0.28	8.11
19990430	BB6	2	Pycnocline	0.38	8.11
19990430	BB6	6	Deep	0.60	7.99
19990430	BB7	0	Surface	0.40	6.67
19990430	BB7	2	-	0.69	6.58
19990430	BB7	4	Pycnocline	0.48	6.86
19990430	BB7	10	-	1.50	6.60
19990430	BB7	20	Deep	0.75	6.77
19990430	BB7	30	-	0.56	6.60
19990430	BB7	75	-	0.39	6.59
19990430	BB8	0	Surface	0.36	8.24
19990430	BB8	2	-	0.72	7.44
19990430	BB8	4	Pycnocline	0.58	8.01

Table 4 (continued).

Date (yyyymmdd)	Site	Depth (m)	Water layer	Fluorescence	pH
19990430	BB8	10	-	1.48	6.97
19990430	BB8	20	Deep	0.59	7.86
19990430	BB8	30	-	0.60	6.99
19990430	BB9	0	Surface	0.44	8.10
19990430	BB9	2	-	0.58	7.98
19990430	BB9	4	Pycnocline	0.38	8.03
19990430	BB9	10	-	1.20	7.92
19990430	BB9	20	Deep	0.52	7.84
19990430	BB9	30	-	0.59	7.80
19990430	FC1	0	Surface	0.80	6.76
19990430	FC1	2	-	1.03	7.37
19990430	FC1	4	Pycnocline	0.66	7.10
19990430	FC1	6	-	0.81	7.54
19990430	FC1	15	-	1.50	7.47
19990430	FC1	20	Deep	0.80	6.95
19990430	FC1	25	-	1.10	7.46
19990430	FC2	0	Surface	0.45	6.66
19990430	FC2	2	-	0.94	7.90
19990430	FC2	4	Pycnocline	0.80	7.29
19990430	FC2	6	-	0.86	7.93
19990430	FC2	15	-	0.90	7.77
19990430	FC2	20	Deep	0.94	7.11
19990430	FC3	0	Surface	0.44	6.65
19990430	FC3	2	-	0.59	7.90
19990430	FC3	4	Pycnocline	0.82	6.92
19990430	FC3	6	-	0.63	8.02
19990430	FC3	15	-	0.85	7.85
19990430	FC3	20	Deep	0.83	6.77
19990430	FC3	25	-	0.78	7.77
19990723	BB1	0	Surface	0.10	7.91
19990723	BB1	2	-	0.30	7.47
19990723	BB1	7	Pycnocline	0.10	7.45
19990723	BB1	15	Deep	0.09	7.37
19990723	BB2	0	Surface	0.18	6.78
19990723	BB2	2	-	0.44	7.43
19990723	BB2	7	Pycnocline	0.26	6.48
19990723	BB2	15	-	0.22	6.90
19990723	BB2	20	Deep	0.40	6.91
19990723	BB3	0	Surface	0.13	7.78
19990723	BB3	2	-	0.35	7.41

Table 4 (continued).

Date (yyyymmdd)	Site	Depth (m)	Water layer	Fluorescence	pH
19990723	BB3	7	Pycnocline	0.10	7.36
19990723	BB3	10	Deep	0.11	7.39
19990723	BB4	0	Surface	0.32	7.60
19990723	BB4	2	Pycnocline	0.50	7.23
19990723	BB4	7	Deep	0.42	7.04
19990723	BB5	0	Surface	0.30	7.63
19990723	BB5	2	-	0.20	7.57
19990723	BB5	7	Pycnocline	0.46	7.08
19990723	BB5	10	Deep	0.16	7.06
19990723	BB6	0	Surface	0.20	7.63
19990723	BB6	2	Pycnocline	0.50	7.12
19990723	BB6	7	Deep	0.38	6.99
19990723	BB7	0	Surface	0.29	7.96
19990723	BB7	2	-	0.27	7.88
19990723	BB7	7	Pycnocline	0.32	7.51
19990723	BB7	10	-	0.24	7.32
19990723	BB7	20	Deep	1.50	7.44
19990723	BB7	30	-	0.24	7.37
19990723	BB8	0	Surface	0.34	7.90
19990723	BB8	2	-	0.26	7.79
19990723	BB8	7	Pycnocline	0.40	7.45
19990723	BB8	10	-	0.20	7.33
19990723	BB8	20	Deep	0.25	7.41
19990723	BB8	30	-	0.14	7.36
19990723	BB9	0	Surface	0.30	7.84
19990723	BB9	2	-	0.32	7.38
19990723	BB9	7	Pycnocline	0.22	7.42
19990723	BB9	10	-	0.30	6.94
19990723	BB9	20	Deep	0.27	7.37
19990723	BB9	30	-	0.10	6.98
19990723	FC1	0	Surface	0.62	7.34
19990723	FC1	2	-	0.30	6.57
19990723	FC1	7	Pycnocline	0.60	7.04
19990723	FC1	15	-	0.40	6.47
19990723	FC1	20	Deep	0.58	7.08
19990723	FC2	0	Surface	0.33	7.96
19990723	FC2	2	-	0.40	7.78
19990723	FC2	7	Pycnocline	0.45	7.50

Table 4 (continued).

Date (yyyymmdd)	Site	Depth (m)	Water layer	Fluorescence	pH
19990723	FC2	15	-	0.26	7.36
19990723	FC2	20	Deep	0.32	7.47
19990723	FC3	0	Surface	0.70	7.53
19990723	FC3	2	-	0.50	7.00
19990723	FC3	7	Pycnocline	0.75	7.32
19990723	FC3	15	-	0.40	7.16
19990723	FC3	20	Deep	0.58	7.21
19991113	BB1	0	Surface	0.23	7.60
19991113	BB1	2	-	0.08	7.60
19991113	BB1	5	Pycnocline	0.18	7.60
19991113	BB1	15	-	0.02	7.00
19991113	BB1	20	Deep	0.05	7.10
19991113	BB2	0	Surface	0.14	7.70
19991113	BB2	2	-	0.06	7.60
19991113	BB2	5	Pycnocline	0.09	7.60
19991113	BB2	15	-	0.04	7.50
19991113	BB2	20	-	0.02	7.50
19991113	BB2	30	Deep	0.09	7.50
19991113	BB3	0	Surface	0.14	7.70
19991113	BB3	2	-	0.07	7.60
19991113	BB3	5	Pycnocline	0.10	7.60
19991113	BB3	10	Deep	0.04	7.30
19991113	BB4	0	Surface	0.09	7.60
19991113	BB4	5	Pycnocline	0.06	7.60
19991113	BB4	10	Deep	0.03	7.40
19991113	BB5	0	Surface	0.11	7.60
19991113	BB5	2	-	0.07	7.60
19991113	BB5	5	Pycnocline	0.06	7.60
19991113	BB5	10	Deep	0.04	7.50
19991113	BB6	0	Surface	0.10	7.60
19991113	BB6	2	-	0.07	7.60
19991113	BB6	5	Pycnocline	0.08	7.60
19991113	BB6	7	Deep	0.03	7.40
19991113	BB7	0	Surface	0.05	7.40
19991113	BB7	2	-	0.07	7.50
19991113	BB7	5	Pycnocline	0.03	7.60
19991113	BB7	10	-	0.03	7.40
19991113	BB7	20	Deep	0.00	7.50
19991113	BB7	30	-	0.02	7.50

Table 4 (continued).

Date (yyyymmdd)	Site	Depth (m)	Water layer	Fluorescence	pH
19991113	BB8	0	Surface	0.13	7.70
19991113	BB8	2	-	0.06	7.50
19991113	BB8	5	Pycnocline	0.05	7.60
19991113	BB8	10	-	0.03	7.50
19991113	BB8	20	Deep	0.01	7.50
19991113	BB8	30	-	0.01	7.50
19991113	BB9	0	Surface	0.11	7.70
19991113	BB9	2	-	0.06	7.60
19991113	BB9	5	Pycnocline	0.07	7.60
19991113	BB9	10	-	0.01	7.50
19991113	BB9	20	Deep	0.06	7.50
19991113	BB9	30	-	0.00	7.50
19991113	FC1	0	Surface	0.12	7.60
19991113	FC1	3	Pycnocline	0.29	7.60
19991113	FC1	10	-	0.03	7.50
19991113	FC1	20	Deep	0.00	7.50
19991113	FC2	0	Surface	0.13	7.60
19991113	FC2	3	Pycnocline	0.15	7.60
19991113	FC2	10	-	0.02	7.50
19991113	FC2	20	Deep	0.05	7.50
19991113	FC3	0	Surface	0.13	7.60
19991113	FC3	3	Pycnocline	0.14	7.60
19991113	FC3	10	-	0.04	7.50
19991113	FC3	20	Deep	0.12	7.50

Table 5. Macronutrients, chlorophyll *a*, and dissolved copper at each site from three depths corresponding to surface, pycnocline, and deep water layer.

Date (yyyymmdd)	Site	Depth (m)	Water layer	Macronutrients NO_3^- (µM)	Macronutrients PO_4^{3-} (µM)	Macronutrients $Si(OH)_4$ (µM)	Chl *a* ($mg \cdot m^{-3}$)	Cu ($mg \cdot L^{-1}$)
19990430	BB1	0	Surface	0.7	< 0.05	13.7	0.35	0.083
19990430	BB1	4	Pycnocline	3.1	0.3	1.7	1.69	0.015
19990430	BB1	20	Deep	19.7	0.8	26.6	2.30	0.014
19990430	BB2	0	Surface	1.6	0.1	6.0	0.43	0.049
19990430	BB2	4	Pycnocline	2.5	0.3	1.5	1.76	0.010
19990430	BB2	20	Deep	15.8	1.3	23.2	0.01	0.010
19990430	BB3	0	Surface	1.4	< 0.05	5.1	0.35	0.074
19990430	BB3	4	Pycnocline	2.5	0.1	11.6	1.73	0.019
19990430	BB3	10	Deep	13.2	1.3	5.8	3.05	0.029
19990430	BB4	0	Surface	2.3	< 0.05	18.4	0.29	0.120
19990430	BB4	3	Pycnocline	2.3	0.4	3.4	0.72	0.023
19990430	BB4	6	Deep	12.9	1.8	11.5	3.54	0.022
19990430	BB5	0	Surface	1.1	< 0.05	15.4	0.29	0.056
19990430	BB5	4	Pycnocline	2.5	0.5	31.9	0.87	0.034
19990430	BB5	10	Deep	15.2	2.0	8.7	3.61	0.035
19990430	BB6	0	Surface	1.0	< 0.05	14.6	0.23	0.134
19990430	BB6	2	Pycnocline	1.9	< 0.05	24.8	0.41	0.047
19990430	BB6	6	Deep	2.9	0.7	15.3	1.79	0.013
19990430	BB7	0	Surface	1.8	< 0.05	13.2	0.55	0.013
19990430	BB7	4	Pycnocline	0.8	< 0.05	27.0	1.08	0.009
19990430	BB7	20	Deep	26.2	2.8	9.6	5.93	0.014
19990430	BB8	0	Surface	1.6	< 0.05	30.4	0.69	0.008
19990430	BB8	4	Pycnocline	1.5	< 0.05	4.3	1.38	0.024
19990430	BB8	20	Deep	24.1	2.5	33.8	4.93	0.009
19990430	BB9	0	Surface	3.7	< 0.05	50.2	0.63	0.008
19990430	BB9	4	Pycnocline	1.5	1.3	13.0	0.98	0.011
19990430	BB9	20	Deep	26.6	2.6	39.0	4.84	0.011
19990430	FC1	0	Surface	1.2	< 0.05	16.9	0.76	0.012
19990430	FC1	4	Pycnocline	< 0.05	< 0.05	3.5	1.24	0.008
19990430	FC1	20	Deep	26.0	2.5	30.0	4.31	0.012
19990430	FC2	0	Surface	0.6	< 0.05	16.0	0.76	0.010
19990430	FC2	4	Pycnocline	< 0.05	< 0.05	1.8	1.21	0.010
19990430	FC2	20	Deep	27.7	2.8	29.7	4.77	0.018

Table 5 (continued).

Date (yyyymmdd)	Site	Depth (m)	Water layer	Macronutrients NO_3^- (µM)	Macronutrients PO_4^{3-} (µM)	Macronutrients $Si(OH)_4$ (µM)	Chl *a* ($mg \cdot m^{-3}$)	Cu ($mg \cdot L^{-1}$)
19990430	FC3	0	Surface	0.9	< 0.05	21.2	0.75	0.015
19990430	FC3	4	Pycnocline	< 0.05	< 0.05	2.7	1.49	0.010
19990430	FC3	20	Deep	24.1	2.5	35.6	3.40	0.009
19990723	BB1	0	Surface	1.3	< 0.05	5.0	0.18	2.980
19990723	BB1	7	Pycnocline	3.3	0.1	19.6	0.53	0.027
19990723	BB1	15	Deep	10.9	0.1	32.4	0.07	0.240
19990723	BB2	0	Surface	1.2	< 0.05	6.0	0.25	0.006
19990723	BB2	7	Pycnocline	10.4	0.9	37.2	0.48	0.019
19990723	BB2	20	Deep	28.7	1.9	20.1	0.07	0.340
19990723	BB3	0	Surface	1.0	< 0.05	4.6	0.15	1.100
19990723	BB3	7	Pycnocline	5.5	0.4	30.8	0.55	0.026
19990723	BB3	10	Deep	18.7	1.1	20.8	0.17	0.030
19990723	BB4	0	Surface	0.8	< 0.05	4.2	0.16	2.460
19990723	BB4	2	Pycnocline	0.6	< 0.05	8.6	1.14	0.048
19990723	BB4	7	Deep	2.8	< 0.05	25.7	0.89	0.020
19990723	BB5	0	Surface	1.4	< 0.05	8.7	0.96	0.063
19990723	BB5	7	Pycnocline	2.7	0.1	23.0	0.43	0.014
19990723	BB5	10	Deep	17.0	0.8	35.4	0.16	0.038
19990723	BB6	0	Surface	0.9	< 0.05	4.9	0.24	0.369
19990723	BB6	2	Pycnocline	1.2	< 0.05	35.4	1.84	0.015
19990723	BB6	7	Deep	15.5	0.8	33.5	0.59	0.018
19990723	BB7	0	Surface	1.1	< 0.05	9.2	0.22	0.023
19990723	BB7	7	Pycnocline	4.2	0.2	29.0	0.67	0.016
19990723	BB7	20	Deep	28.4	2.0	39.1	0.05	0.017
19990723	BB8	0	Surface	1.9	< 0.05	10.4	0.50	0.010
19990723	BB8	7	Pycnocline	5.2	0.2	28.2	0.54	0.010
19990723	BB8	20	Deep	29.7	2.1	33.4	0.04	0.016
19990723	BB9	0	Surface	1.0	< 0.05	6.8	0.23	0.012
19990723	BB9	7	Pycnocline	6.0	0.4	6.0	0.50	0.013
19990723	BB9	20	Deep	29.1	1.9	38.8	0.04	0.015
19990723	FC1	0	Surface	1.3	< 0.05	1.3	0.63	0.006
19990723	FC1	7	Pycnocline	5.1	0.3	5.1	1.16	0.014
19990723	FC1	20	Deep	29.7	2.3	36.1	0.10	0.016

Table 5 (continued).

Date (yyyymmdd)	Site	Depth (m)	Water layer	Macronutrients NO_3^- (µM)	Macronutrients PO_4^{3-} (µM)	Macronutrients $Si(OH)_4$ (µM)	Chl *a* ($mg \cdot m^{-3}$)	Cu ($mg \cdot L^{-1}$)
19990723	FC2	0	Surface	1.4	< 0.05	1.4	0.58	<0.005
19990723	FC2	7	Pycnocline	6.5	0.4	6.5	0.69	0.014
19990723	FC2	20	Deep	24.3	1.9	18.8	0.12	0.016
19990723	FC3	0	Surface	0.9	< 0.05	0.9	1.86	0.010
19990723	FC3	7	Pycnocline	0.7	< 0.05	0.7	1.43	0.012
19990723	FC3	20	Deep	29.3	2.3	82.9	0.09	0.019
19991113	BB1	0	Surface	19.1	1.1	54.1	0.45	0.084
19991113	BB1	5	Pycnocline	18.0	1.6	45.0	0.15	0.061
19991113	BB1	20	Deep	24.9	0.1	35.3	0.05	0.750
19991113	BB2	0	Surface	15.3	1.2	38.3	0.52	0.012
19991113	BB2	5	Pycnocline	22.6	2.0	47.0	0.15	0.013
19991113	BB2	30	Deep	25.0	2.4	47.7	0.05	0.009
19991113	BB3	0	Surface	14.2	0.8	56.9	0.33	0.187
19991113	BB3	5	Pycnocline	22.1	2.0	50.0	0.20	0.027
19991113	BB3	10	Deep	20.9	0.8	49.0	0.07	0.201
19991113	BB4	0	Surface	14.6	0.7	53.2	0.34	0.373
19991113	BB4	5	Pycnocline	22.6	2.1	49.6	0.14	0.070
19991113	BB4	10	Deep	22.2	1.7	52.8	0.07	0.125
19991113	BB5	0	Surface	15.8	1.2	56.6	0.50	0.071
19991113	BB5	5	Pycnocline	16.9	1.6	42.9	0.11	0.015
19991113	BB5	10	Deep	20.6	2.4	48.2	0.10	0.013
19991113	BB6	0	Surface	14.8	0.7	57.9	0.32	0.156
19991113	BB6	5	Pycnocline	21.4	2.0	50.7	0.42	0.023
19991113	BB6	7	Deep	22.6	1.7	55.4	0.09	0.142
19991113	BB7	0	Surface	10.2	< 0.05	59.9	0.19	0.355
19991113	BB7	5	Pycnocline	19.4	2.1	49.8	0.15	0.022
19991113	BB7	20	Deep	26.3	2.5	48.0	0.07	0.009
19991113	BB8	0	Surface	4.6	0.1	21.2	0.47	0.017
19991113	BB8	5	Pycnocline	16.7	1.4	36.7	0.16	0.009
19991113	BB8	20	Deep	29.5	2.6	25.0	0.07	0.019
19991113	BB9	0	Surface	10.5	0.3	57.2	0.24	0.181
19991113	BB9	5	Pycnocline	23.1	2.1	49.6	0.22	0.030
19991113	BB9	20	Deep	29.7	2.8	53.3	0.06	0.033

Table 5 (continued).

Date (yyyymmdd)	Site	Depth (m)	Water layer	Macronutrients NO_3^- (µM)	Macronutrients PO_4^{3-} (µM)	Macronutrients $Si(OH)_4$ (µM)	Chl *a* ($mg \cdot m^{-3}$)	Cu ($mg \cdot L^{-1}$)
19991113	FC1	0	Surface	13.4	0.9	57.9	0.29	0.024
19991113	FC1	3	Pycnocline	19.1	1.6	44.7	0.47	0.019
19991113	FC1	20	Deep	28.7	3.0	57.9	0.07	0.010
19991113	FC2	0	Surface	10.4	0.7	46.6	0.30	0.023
19991113	FC2	3	Pycnocline	16.5	1.5	47.7	0.32	0.015
19991113	FC2	20	Deep	30.0	2.7	59.9	0.06	0.014
19991113	FC3	0	Surface	13.9	0.9	57.4	0.28	0.030
19991113	FC3	3	Pycnocline	20.6	1.8	50.8	0.35	0.010
19991113	FC3	20	Deep	29.7	2.7	55.8	0.06	0.009

Table 6. Primary productivity expressed as carbon uptake rates determined from laboratory incubations of water samples.

Date (yyyymmdd)	Site	Replicate number	Carbon-14 uptake rates		
			Raw data	Mean ($mg\ C \cdot m^{-3} \cdot h^{-1}$)	SD
19990430	BB1	1	28.36		
19990430	BB1	2	27.57		
19990430	BB1	3	27.55	27.82	0.46
19990430	BB2	1	22.90		
19990430	BB2	2	20.97		
19990430	BB2	3	22.01	21.96	0.97
19990430	BB3	1	13.50		
19990430	BB3	2	12.21		
19990430	BB3	3	8.04	11.25	2.85
19990430	BB4	1	5.27		
19990430	BB4	2	4.88		
19990430	BB4	3	5.99	5.38	0.56
19990430	BB5	1	10.03		
19990430	BB5	2	11.44		
19990430	BB5	3	9.91	10.46	0.85
19990430	BB6	1	4.96		
19990430	BB6	2	4.14		
19990430	BB6	3	3.67	4.26	0.65
19990430	BB7	1	58.55		
19990430	BB7	2	53.21		
19990430	BB7	3	49.50	53.75	4.55
19990430	BB8	1	90.13		
19990430	BB8	2	97.35		
19990430	BB8	3	75.43	87.64	11.17
19990430	BB9	1	57.58		
19990430	BB9	2	64.95		
19990430	BB9	3	41.99	54.84	11.72
19990430	FC1	1	40.96		
19990430	FC1	2	50.96		
19990430	FC1	3	36.35	42.76	7.47

Table 6 (continued).

Date (yyyymmdd)	Site	Replicate number	Carbon-14 uptake rates		
			Raw data	Mean ($mg\ C \cdot m^{-3} \cdot h^{-1}$)	SD
19990430	FC2	1	64.91		
19990430	FC2	2	51.83		
19990430	FC2	3	46.82	54.52	9.34
19990430	FC3	1	57.98		
19990430	FC3	2	66.09		
19990430	FC3	3	56.66	60.24	5.11
19990723	BB1	1	14.02		
19990723	BB1	2	12.12		
19990723	BB1	3	10.53	12.22	1.75
19990723	BB2	1	38.42		
19990723	BB2	2	44.11		
19990723	BB2	3	34.47	39.00	4.85
19990723	BB3	1	4.91		
19990723	BB3	2	4.72		
19990723	BB3	3	4.60	4.74	0.16
19990723	BB4	1	8.37		
19990723	BB4	2	5.26		
19990723	BB4	3	4.41	6.01	2.08
19990723	BB5	1	6.22		
19990723	BB5	2	8.58		
19990723	BB5	3	7.82	7.54	1.20
19990723	BB6	1	5.86		
19990723	BB6	2	7.21		
19990723	BB6	3	7.86	6.97	1.02
19990723	BB7	1	19.60		
19990723	BB7	2	19.84		
19990723	BB7	3	15.19	18.21	2.62
19990723	BB8	1	41.53		
19990723	BB8	2	59.70		
19990723	BB8	3	46.66	49.30	9.36

Table 6 (continued).

Date (yyyymmdd)	Site	Replicate number	Carbon-14 uptake rates		
			Raw data	Mean ($mg\ C \cdot m^{-3} \cdot h^{-1}$)	SD
19990723	BB9	1	16.73		
19990723	BB9	2	15.92		
19990723	BB9	3	13.82	15.49	1.50
19990723	FC1	1	13.08		
19990723	FC1	2	14.01		
19990723	FC1	3	14.01	13.70	0.54
19990723	FC2	1	14.08		
19990723	FC2	2	12.39		
19990723	FC2	3	15.11	13.86	1.37
19990723	FC3	1	11.54		
19990723	FC3	2	13.73		
19990723	FC3	3	11.71	12.33	1.22
19991113	BB1	1	0.34		
19991113	BB1	2	0.36		
19991113	BB1	3	0.39	0.36	0.03
19991113	BB2	1	2.05		
19991113	BB2	2	2.36		
19991113	BB2	3	2.08	2.16	0.17
19991113	BB3	1	0.27		
19991113	BB3	2	0.27		
19991113	BB3	3	0.27	0.27	0.00
19991113	BB4	1	0.24		
19991113	BB4	2	0.31		
19991113	BB4	3	0.25	0.27	0.04
19991113	BB5	1	0.27		
19991113	BB5	2	0.27		
19991113	BB5	3	0.27	0.27	0.00
19991113	BB6	1	0.90		
19991113	BB6	2	0.82		
19991113	BB6	3	0.86	0.86	0.04

Table 6 (continued).

Date (yyyymmdd)	Site	Replicate number	Carbon-14 uptake rates		
			Raw data	Mean ($mg\ C \cdot m^{-3} \cdot h^{-1}$)	SD
19991113	BB7	1	0.19		
19991113	BB7	2	0.18		
19991113	BB7	3	0.31	0.23	0.08
19991113	BB8	1	1.84		
19991113	BB8	2	1.78		
19991113	BB8	3	1.75	1.79	0.05
19991113	BB9	1	0.29		
19991113	BB9	2	0.41		
19991113	BB9	3	0.31	0.34	0.07
19991113	FC1	1	1.78		
19991113	FC1	2	1.56		
19991113	FC1	3	1.50	1.61	0.15
19991113	FC2	1	1.64		
19991113	FC2	2	1.67		
19991113	FC2	3	1.72	1.68	0.04
19991113	FC3	1	1.70		
19991113	FC3	2	1.65		
19991113	FC3	3	1.60	1.65	0.05

Table 7. Phytoplankton codes used in Table 8.

Code	Genus
ALEX	*Alexandrium spp.*
CERA	*Ceratium spp.*
CHAE	*Chaetoceros spp.*
CHLA	*Chlamydomonas spp.*
CHRO	Unidentified Chromophyta (flagellates)
COSC	*Coscinodiscus spp.*
DIAT	Unidentified benthic diatom
DICT	*Dictyocha spp.*
DIFL	Unidentified dinoflagellate
DINO	*Dinobryon spp.*
DIPH	*Dinophysis spp.*
DITY	*Ditylum spp.*
EUGL	*Euglena spp.*
GONI	*Goniodoma spp.*
GONY	*Gonyaulax spp.*
GUIN	*Guinardia spp.*
GYMN	*Gymnodinium spp.*
HETE	*Heterosigma spp.*
MELO	*Melosira spp.*
NAVI	*Navicula spp.*
NITZ	*Nitzchia spp.*
ODON	*Odontella spp.*
PROT	*Protoperidinium spp.*
RHOD	*Rhodomonas spp.*
SCRI	*Scrippsiella spp.*
SKEL	*Skeletonema spp.*
SYNE	*Synedropsis spp.*
TETR	*Tetraselmis spp.*
THAL	*Thalassiosira spp.*
THAS	*Thalassionema spp.*

Table 8. Qualitative identification of phytoplankton present at Britannia Creek estuary and Furry Creek estuary. NS = not sampled. + = present, - = absent.

Date (yyyymmdd)	Site	Water layer	ALEX	CERA	CHAE	CHLA	CHRO	COSC	DIAT	DICT	DIFL	DINO	DIPH	DITY
19990430	BB1	Surface	-	-	+	-	+	+	-	-	-	-	-	-
19990430	BB1	Pycnocline	-	-	+	-	-	+	-	-	-	-	-	-
19990430	BB1	Deep	-	-	+	-	-	+	-	-	-	-	-	-
19990430	BB2	Surface	-	-	+	-	-	-	-	-	-	-	-	+
19990430	BB2	Pycnocline	-	-	+	-	-	-	-	-	-	-	-	-
19990430	BB2	Deep	-	-	+	-	-	-	-	-	-	-	-	+
19990430	BB3	Surface	-	-	+	-	+	-	-	-	-	-	-	-
19990430	BB3	Pycnocline	-	-	+	-	-	-	-	-	-	-	-	+
19990430	BB3	Deep	-	-	-	-	+	-	-	-	-	-	-	+
19990430	BB4	Surface	-	-	+	-	-	-	-	+	-	-	-	+
19990430	BB4	Pycnocline	-	-	+	-	-	-	-	-	-	-	-	+
19990430	BB4	Deep	-	-	+	-	-	-	-	-	-	-	-	+
19990430	BB5	Surface	-	-	+	-	+	-	-	-	-	-	-	-
19990430	BB5	Pycnocline	-	-	+	-	+	-	+	-	-	-	-	-
19990430	BB5	Deep	-	-	+	-	+	-	-	-	-	-	-	-
19990430	BB6	Surface	-	-	-	-	-	-	-	-	+	-	-	-
19990430	BB6	Pycnocline	-	-	+	-	-	-	+	-	+	+	-	-
19990430	BB6	Deep	-	-	+	-	-	-	-	-	-	-	-	-
19990430	BB7	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19990430	BB7	Pycnocline	-	-	+	-	-	-	-	-	-	-	-	-
19990430	BB7	Deep	-	-	+	-	-	-	-	-	-	-	-	+
19990430	BB8	Surface	-	-	+	+	-	-	-	-	-	-	-	-
19990430	BB8	Pycnocline	-	-	+	-	+	-	-	-	-	-	-	-
19990430	BB8	Deep	-	-	+	-	-	-	-	-	-	-	-	+
19990430	BB9	Surface	-	-	+	+	-	-	-	-	-	-	-	-
19990430	BB9	Pycnocline	-	-	+	-	+	-	-	-	-	-	-	-
19990430	BB9	Deep	-	-	+	-	-	+	+	-	-	-	-	+
19990430	FC1	Surface	-	-	+	-	-	-	-	-	-	-	-	-
19990430	FC1	Pycnocline	+	-	+	-	-	-	-	-	-	-	-	-
19990430	FC1	Deep	-	-	+	-	-	-	-	-	-	-	-	+
19990430	FC2	Surface	-	-	+	-	-	-	-	-	-	-	-	-
19990430	FC2	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19990430	FC2	Deep	-	-	+	-	-	-	-	-	-	-	-	+

Table 8 (continued).

EUGL	GONI	GONY	GUIN	GYMN	HETE	MELO	NAVI	NITZ	ODON	PROT	RHOD	SCRI	SKEL	SYNE	TETR	THAL	THAS
-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	+	-	+	-	-	+	-	+	-	-	+	-
-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	+	+
-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+	-
-	-	-	-	-	-	-	-	+	+	-	+	-	+	-	-	+	-
-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	+	-
-	-	-	-	+	-	-	-	-	-	-	+	-	+	-	-	-	-
-	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	+	-	+	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	+	+
-	-	-	-	-	-	-	-	+	-	+	+	-	+	-	-	-	-
-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	+	-	-
-	-	-	-	-	-	-	-	+	-	-	-	-	+	-		+	-
-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-
+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-
-	-	-	-	+	-	+	-	-	-	-	-	-	+	-	-	+	-
-	-	-	-	+	-	-	-	-	-	-	+	-	+	-	-	-	-
-	-	-	-	+	-	-	-	+	-	-	+	-	+	-	-	+	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-
+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-
+	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	+	-	-	+	-	+	-	-	+	-
-	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+
+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-
-	+	-	-	+	-	-	-	-	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	+	+
-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-	+	-
-	-	-	-	+	-	-	-	-	-	+	-	-	+	-	-	+	-
-	-	-	-	+	-	-	-	+	-	-	-	-	+	-	-	+	-

Table 8 (continued).

Date (yyyymmdd)	Site	Water layer	ALEX	CERA	CHAE	CHLA	CHRO	COSC	DIAT	DICT	DIFL	DINO	DIPH	DITY
19990430	FC3	Surface	-	-	+	-	-	-	-	-	-	-	-	-
19990430	FC3	Pycnocline	-	-	+	-	+	-	-	-	-	-	-	-
19990430	FC3	Deep	-	-	+	-	-	-	-	-	-	-	-	+
19990723	BB1	Surface	-	-	-	-	-	-	-	-	-	-	-	+
19990723	BB1	Pycnocline	-	-	+	-	-	-	-	-	-	-	-	-
19990723	BB1	Deep	-	-	-	-	-	-	+	-	-	-	-	-
19990723	BB2	Surface	-	-	-	-	-	-	+	-	-	-	-	-
19990723	BB2	Pycnocline	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB2	Deep	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB3	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB3	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19990723	BB3	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19990723	BB4	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB4	Pycnocline	-	-	+	-	-	-	-	-	-	-	-	-
19990723	BB4	Deep	-	-	+	-	-	+	-	-	-	-	-	-
19990723	BB5	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB5	Pycnocline	-	-	-	-	-	+	-	-	-	-	-	-
19990723	BB5	Deep	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB6	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB6	Pycnocline	-	-	-	-	+	-	-	-	-	-	+	-
19990723	BB6	Deep	-	-	-	-	-	-	+	-	-	-	-	-
19990723	BB7	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB7	Pycnocline	-	-	-	-	+	-	-	-	-	-	+	-
19990723	BB7	Deep	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB8	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19990723	BB8	Pycnocline	-	-	-	-	-	+	-	-	-	-	-	-
19990723	BB8	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19990723	BB9	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19990723	BB9	Pycnocline	-	-	-	-	+	+	-	-	-	-	-	-
19990723	BB9	Deep	-	-	-	-	-	-	-	-	-	-	-	-
19990723	FC1	NS												
19990723	FC2	NS												

Table 8 (continued).

EUGL	GONI	GONY	GUIN	GYMN	HETE	MELO	NAVI	NITZ	ODON	PROT	RHOD	SCRI	SKEL	SYNE	TETR	THAL	THAS
-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-	+	+
-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	+	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	+	+
-	-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-
-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	+	+	+	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	+	+	-	-	-	+	+	-	-	-	-	-	-
-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	+	-	+	+	-	-	-	-	+	-	-	-	-	-	-
-	-	-	+	-	+	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	+	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	+	-	+	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	+	-	-	-	-	-	-	-	+	-	+	-	-	-	-
-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	+	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	+	-	-	-	-	-	+	-	-	+	-	-	-
-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	+	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	+	-	-	-

Table 8 (continued).

Date (yyyymmdd)	Site	Water layer	ALEX	CERA	CHAE	CHLA	CHRO	COSC	DIAT	DICT	DIFL	DINO	DIPH	DITY
19990723	FC3	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19990723	FC3	Pycnocline	-	-	-	-	+	-	-	-	-	-	+	-
19990723	FC3	Deep	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB1	Surface	+	-	-	-	+	-	-	-	-	-	-	-
19991113	BB1	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB1	Deep	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB2	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB2	Pycnocline	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB2	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB3	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB3	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB3	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB4	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB4	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB4	Deep	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB5	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB5	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB5	Deep	-	-	+	-	-	-	-	-	-	-	-	-
19991113	BB6	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB6	Pycnocline	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB6	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB7	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB7	Pycnocline	-	+	-	-	+	-	-	+	-	-	-	-
19991113	BB7	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB8	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB8	Pycnocline	-	-	-	-	-	-	-	-	-	-	-	-
19991113	BB8	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB9	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB9	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19991113	BB9	Deep	-	-	-	-	-	-	-	-	-	-	-	+
19991113	FC1	Surface	-	-	-	-	+	-	-	-	-	-	-	-
19991113	FC1	Pycnocline	-	-	-	-	+	-	-	-	-	-	-	-
19991113	FC1	Deep	-	-	-	-	+	-	-	-	-	-	-	-

Table 8 (continued).

EUGL	GONI	GONY	GUIN	GYMN	HETE	MELO	NAVI	NITZ	ODON	PROT	RHOD	SCRI	SKEL	SYNE	TETR	THAL	THAS
-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	+	+	+	-	-	-	-	+	+	-	-	-	-	+	-
-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	-
-	-	-	-	+		-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-
-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-	-
-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	-	-	+	-	+	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	+	-	-	-	-	-
-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-
-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 8 (continued).

Date (yyyymmdd)	Site	Water layer	ALEX	CERA	CHAE	CHLA	CHRO	COSC	DIAT	DICT	DIFL	DINO	DIPH	DITY
19991113	FC2	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19991113	FC2	Pycnocline	-	-	-	-	-	-	-	-	-	-	-	-
19991113	FC2	Deep	-	-	-	-	+	-	-	-	-	-	-	-
19991113	FC3	Surface	-	-	-	-	-	-	-	-	-	-	-	-
19991113	FC3	Pycnocline	-	-	-	-	-	-	-	-	-	-	-	-
19991113	FC3	Deep	-	-	-	-	+	-	-	-	-	-	-	-

Table 8 (continued).

EUGL	GONI	GONY	GUIN	GYMN	HETE	MELO	NAVI	NITZ	ODON	PROT	RHOD	SCRI	SKEL	SYNE	TETR	THAL	THAS
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	-	-
-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 9. Zooplankton biomass (integrated from depth to surface) at selected sites.
SD = standard deviation.

Date (yyyymmdd)	Site	Replicate number	Depth (m)	Dry weight ($mg \cdot m^{-3}$)		
				Raw data	Mean	SD
19990430	BB1	1	25	41.16		
19990430	BB1	2	25	63.33		
19990430	BB1	3	25	68.78	57.76	14.63
19990430	BB8	1	50	41.32		
19990430	BB8	2	50	43.55		
19990430	BB8	3	50	31.65	38.84	6.33
19990430	FC1	1	25	124.95		
19990430	FC1	2	25	97.14		
19990430	FC1	3	25	107.49	109.86	14.06
19990722	BB1	1	20	6.68		
19990722	BB1	2	20	17.93		
19990722	BB1	3	20	8.97	11.19	5.95
19990722	BB8	1	50	6.68		
19990722	BB8	2	50	5.98		
19990722	BB8	3	50	5.41	6.02	0.63
19990722	FC1	1	20	8.09		
19990722	FC1	2	20	6.86		
19990722	FC1	3	20	4.75	6.56	1.69
19991104	BB1	1	20	5.63		
19991104	BB1	2	20	5.27		
19991104	BB1	3	20	5.98	5.63	0.35
19991104	BB8	1	50	6.40		
19991104	BB8	2	50	8.37		
19991104	BB8	3	50	6.54	7.10	1.10
19991104	FC1	1	20	6.50		
19991104	FC1	2	20	5.45		
19991104	FC1	3	20	4.04	5.33	1.23

Table 10. Zooplankton codes used in Table 11.

Code	Order/Family	Life stage	Group
AEQU	Aequoreidae	hydromedusa	Hydrozoa
AMPH	Amphipoda	adult	Amphipoda
BIVL	Bivalvia	larvae	Bivalvia
BRAM	Brachyura	megalops	Brachyura
BRAZ	Brachyura	zoea	Brachyura
BRYO	Bryozoa	cyphonautes	Bryozoa
CALN	Calanoida	adult	Copepoda
CHAE	Chaetognatha		Chaetognatha
CIRC	Cirripedia	cypris	Cirripedia
CIRN	Cirripedia	nauplii	Cirripedia
CYCL	Cyclopoida[1]	adult	Copepoda
DECN	Decapoda	nauplii	Decapoda
DEMZ	Decapoda	mysis-zoea	Decapoda
ECHA	Echinodermata	auricularia	Echinodermata
EGGS	Eggs		
GASL	Gastropoda	larvae	Gastropoda
HYDR	Hydrozoa	Hydromedusa	Cnidaria
HYPA	Hyperiidea	adult	Amphipoda
ISOP	Isopoda		Isopoda
NAUP	Copepoda	nauplii	Copepoda
OIKO	Oikopleuridae		Larvacea
OSTR	Ostracoda	adult	Ostracoda
PODO	Podonidae	adult	Cladocera
POLA	Polychaeta	adult	Polychaeta
POLL	Polychaeta	Larvae	Polychaeta
TROC	Trochophore		Trochophore

[1]Cyclopoid copepod identified as Corycaeus sp.

Table 11. Identification and numerical abundance of zooplankton present at Britannia Creek estuary and Furry Creek estuary. At least 200 organisms per sample were counted.

Date (yyyymmdd)	Site	AEQU	AMPH	BIVL	BRAM	BRAZ	BRYO	CALN	CHAE	CIRC	CIRN	CYCL	DECN	DEMZ
19990430	BB1	-	-	18	-	1	1	75	-	-	-	3	-	-
19990701	BB1	-	-	19	-	-	-	141	-	-	-	11	-	-
19991104	BB1	-	-	2	-	-	21	131	-	-	-	26	-	-
19990430	BB8	-	-	13	-	-	6	120	-	5	7	3	2	-
19990701	BB8	1	3	88	-	-	-	98	1	-	-	3	-	-
19991104	BB8	-	-	1	-	-	85	149	-	-	-	10	-	-
19990430	FC1	-	-	5	-	-	3	77	-	1	4	4	7	-
19990701	FC1	-	-	3	1	-	2	160	-	-	-	5	-	1
19991104	FC1	-	-	1	-	-	38	136	-	-	-	14	-	-

Table 11 (continued).

ECHA	GASL	HYDR	HYPA	ISOP	OIKO	OSTR	PODO	POLL	POLA	NAUP	TROC	Total
-	3	-	-	-	22	-	3	5	59	15	1	210
-	24	-	4	-	1	9	6	-	-	2	-	217
1	2	1	-	-	19	-	-	-	-	3	-	206
-	4	-	-	-	20	-	-	10	-	16	2	208
-	15	-	1	1	-	5	1	-	-	-	-	217
-	9	2	-	-	1	-	-	-	-	1	1	259
-	4	-	-	-	33	-	1	3	54	18	-	214
-	-	-	-	-	-	2	24	-	-	4	-	202
-	-	1	-	-	11	-	-	-	-	2	-	203

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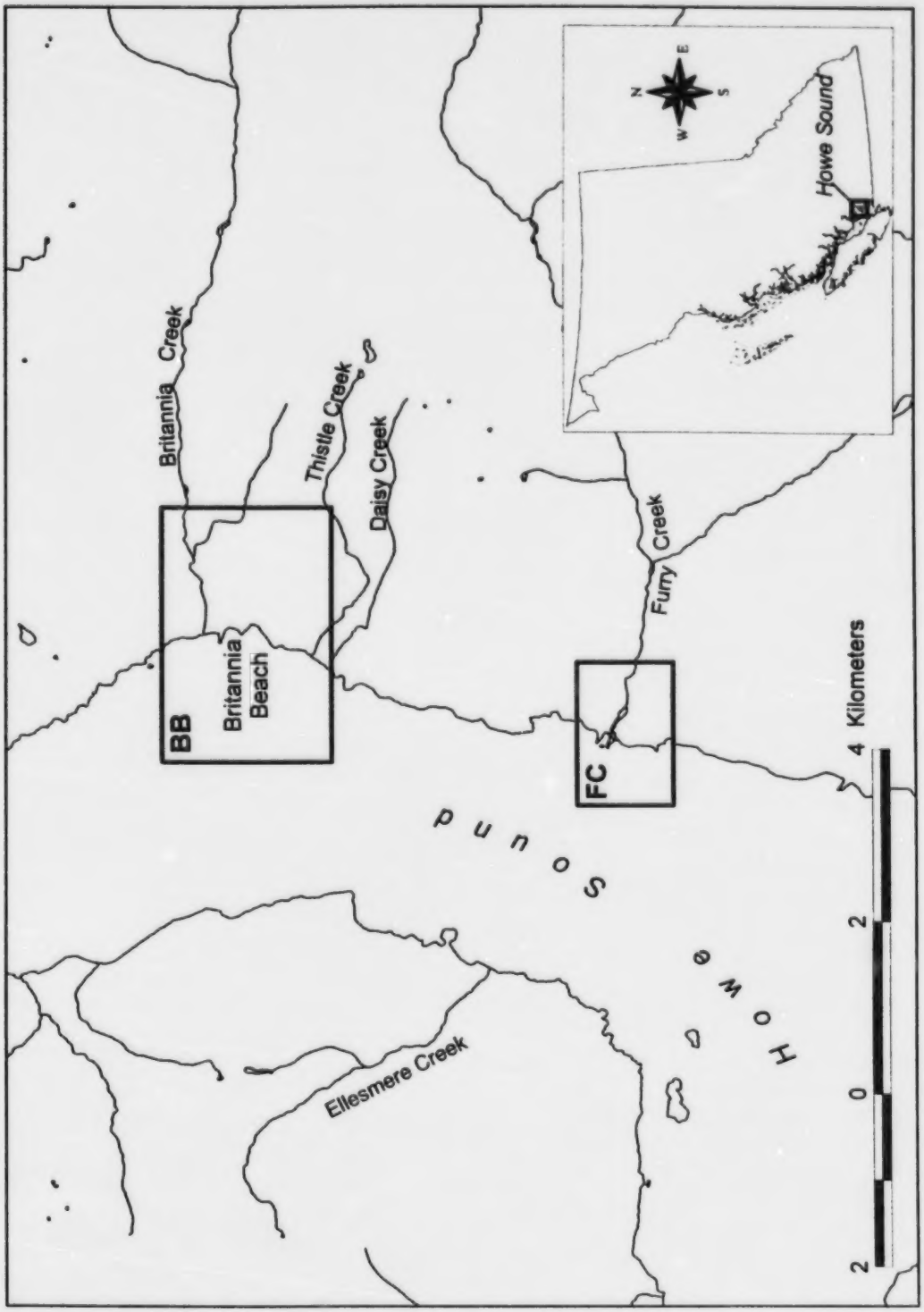

Figure 1. Overview of sampling locations on Howe Sound during 1999.

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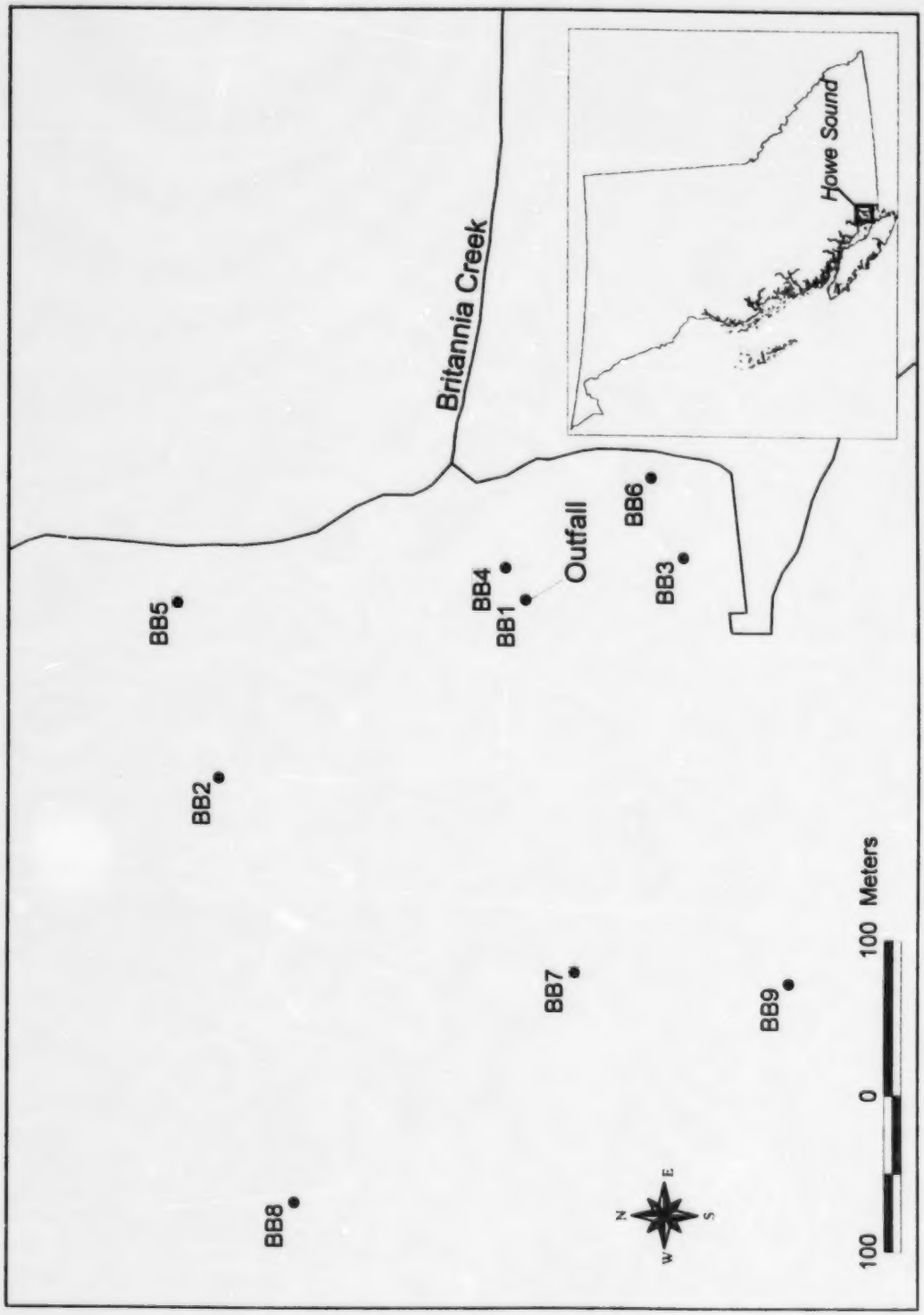

Figure 2. Location of sampling sites near Britannia Creek estuary.

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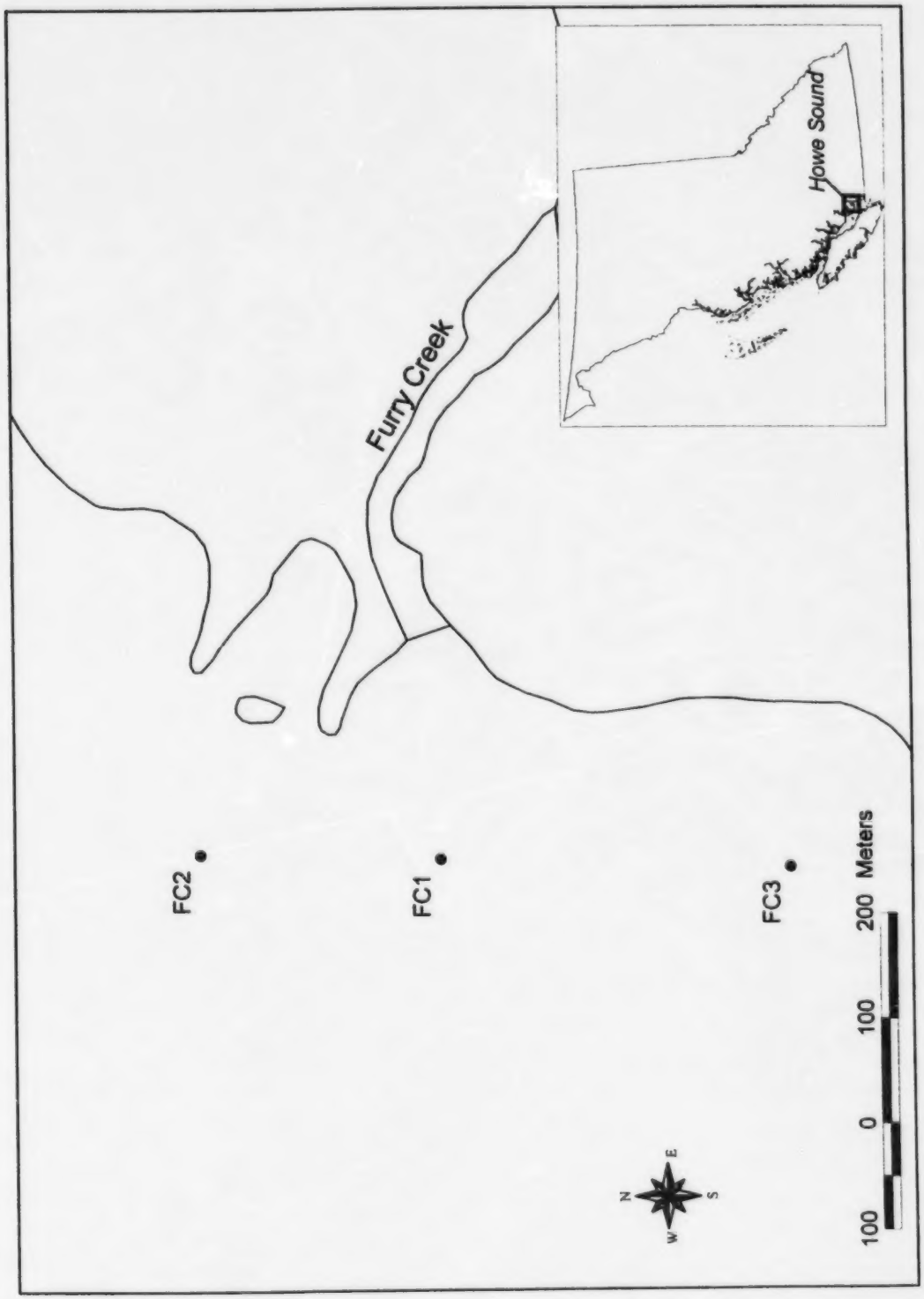

Figure 3. Location of sampling sites near Furry Creek estuary.

Table 2. Depth profiles of temperature, salinity and water density at each site during each sampling period.

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB1	24.99	8.19	29.45	22.89
19990430	BB1	24.96	8.18	29.42	22.87
19990430	BB1	24.38	8.19	29.36	22.82
19990430	BB1	23.46	8.17	29.39	22.85
19990430	BB1	22.73	8.17	29.38	22.84
19990430	BB1	21.73	8.16	29.33	22.80
19990430	BB1	20.96	8.16	29.34	22.81
19990430	BB1	20.11	8.14	29.21	22.71
19990430	BB1	19.25	8.13	29.16	22.68
19990430	BB1	18.43	8.14	29.06	22.60
19990430	BB1	17.57	8.16	28.91	22.47
19990430	BB1	16.72	8.18	28.83	22.41
19990430	BB1	15.90	8.28	28.62	22.23
19990430	BB1	15.07	8.45	28.33	21.98
19990430	BB1	14.22	8.55	28.00	21.70
19990430	BB1	13.33	8.57	27.97	21.68
19990430	BB1	12.45	8.56	27.96	21.67
19990430	BB1	11.59	8.65	27.81	21.55
19990430	BB1	10.68	8.68	27.80	21.54
19990430	BB1	9.91	8.80	27.63	21.39
19990430	BB1	9.09	8.86	27.58	21.34
19990430	BB1	8.17	8.90	27.53	21.29
19990430	BB1	7.32	8.90	27.56	21.32
19990430	BB1	6.53	8.95	27.50	21.26
19990430	BB1	5.67	9.06	27.41	21.17
19990430	BB1	4.94	9.15	27.33	21.10
19990430	BB1	4.09	9.18	27.30	21.07
19990430	BB1	3.66	9.35	27.13	20.92
19990430	BB1	2.80	10.56	25.68	19.60
19990430	BB1	1.77	10.63	24.07	18.34
19990430	BB1	0.91	11.38	23.39	17.70
19990430	BB1	0.42	11.20	21.66	16.38
19990430	BB1	0.15	10.66	18.18	13.76
19990430	BB2	35.18	8.27	29.49	22.92
19990430	BB2	35.12	8.27	29.50	22.92
19990430	BB2	35.03	8.26	29.51	22.93
19990430	BB2	34.88	8.27	29.47	22.90
19990430	BB2	35.03	8.27	29.48	22.91
19990430	BB2	34.76	8.27	29.48	22.91
19990430	BB2	34.24	8.26	29.48	22.91
19990430	BB2	33.63	8.26	29.48	22.91
19990430	BB2	32.83	8.25	29.49	22.92
19990430	BB2	32.04	8.25	29.48	22.91
19990430	BB2	31.25	8.25	29.47	22.90
19990430	BB2	30.48	8.23	29.46	22.90

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB2	29.60	8.23	29.44	22.88
19990430	BB2	28.74	8.22	29.43	22.87
19990430	BB2	28.04	8.22	29.43	22.87
19990430	BB2	27.10	8.21	29.39	22.84
19990430	BB2	26.27	8.21	29.38	22.83
19990430	BB2	25.57	8.20	29.33	22.80
19990430	BB2	24.66	8.19	29.31	22.78
19990430	BB2	23.95	8.19	29.31	22.78
19990430	BB2	23.01	8.17	29.24	22.73
19990430	BB2	22.27	8.16	29.21	22.71
19990430	BB2	21.42	8.15	29.20	22.71
19990430	BB2	20.60	8.14	29.17	22.68
19990430	BB2	19.71	8.15	29.08	22.61
19990430	BB2	19.01	8.13	28.96	22.52
19990430	BB2	18.19	8.13	28.93	22.50
19990430	BB2	17.39	8.15	28.87	22.44
19990430	BB2	16.57	8.17	28.75	22.35
19990430	BB2	15.71	8.22	28.65	22.26
19990430	BB2	15.01	8.32	28.32	21.99
19990430	BB2	14.16	8.38	28.15	21.85
19990430	BB2	13.36	8.57	27.85	21.59
19990430	BB2	12.54	8.63	27.73	21.48
19990430	BB2	11.71	8.66	27.68	21.44
19990430	BB2	10.98	8.73	27.60	21.37
19990430	BB2	10.07	8.73	27.58	21.35
19990430	BB2	9.24	8.77	27.54	21.31
19990430	BB2	8.42	8.84	27.45	21.24
19990430	BB2	7.53	8.91	27.40	21.19
19990430	BB2	6.83	8.91	27.40	21.18
19990430	BB2	5.86	8.99	27.32	21.11
19990430	BB2	5.06	9.04	27.26	21.06
19990430	BB2	4.27	9.12	27.16	20.97
19990430	BB2	3.41	9.30	27.02	20.84
19990430	BB2	2.50	10.52	24.76	18.89
19990430	BB2	1.77	10.66	23.90	18.21
19990430	BB2	1.03	11.35	23.05	17.44
19990430	BB2	0.18	11.20	19.14	14.43
19990430	BB3	9.79	8.82	27.55	21.32
19990430	BB3	9.76	8.82	27.56	21.33
19990430	BB3	9.76	8.80	27.57	21.34
19990430	BB3	9.30	8.84	27.54	21.30
19990430	BB3	8.75	8.84	27.53	21.30
19990430	BB3	8.36	8.84	27.52	21.29
19990430	BB3	7.63	8.90	27.48	21.25
19990430	BB3	7.01	8.91	27.46	21.24
19990430	BB3	6.34	8.93	27.43	21.21
19990430	BB3	5.67	8.98	27.38	21.16

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB3	5.00	9.07	27.29	21.08
19990430	BB3	4.39	9.19	27.19	20.98
19990430	BB3	3.72	9.22	27.15	20.95
19990430	BB3	3.11	9.46	26.93	20.74
19990430	BB3	2.44	10.68	24.90	18.98
19990430	BB3	1.74	10.89	25.09	19.09
19990430	BB3	1.09	10.94	23.92	18.18
19990430	BB3	0.54	11.21	22.69	17.18
19990430	BB3	0.00	9.11	14.56	11.15
19990430	BB4	9.88	8.65	27.77	21.51
19990430	BB4	9.76	8.65	27.78	21.52
19990430	BB4	9.40	8.69	27.74	21.48
19990430	BB4	8.94	8.69	27.72	21.47
19990430	BB4	8.17	8.81	27.52	21.29
19990430	BB4	7.32	8.82	27.51	21.28
19990430	BB4	6.62	8.86	27.49	21.26
19990430	BB4	5.92	9.04	27.32	21.11
19990430	BB4	5.00	9.12	27.23	21.03
19990430	BB4	4.24	9.14	27.23	21.02
19990430	BB4	3.66	9.58	26.82	20.64
19990430	BB4	2.74	10.67	24.08	18.34
19990430	BB4	1.95	10.65	24.08	18.34
19990430	BB4	1.28	10.88	23.87	18.14
19990430	BB4	0.48	11.12	19.69	14.87
19990430	BB5	9.98	8.80	27.75	21.48
19990430	BB5	9.76	8.78	27.76	21.49
19990430	BB5	9.40	8.80	27.73	21.46
19990430	BB5	9.03	8.81	27.73	21.46
19990430	BB5	8.60	8.83	27.72	21.45
19990430	BB5	8.17	8.87	27.67	21.40
19990430	BB5	7.44	8.90	27.63	21.37
19990430	BB5	6.68	8.95	27.60	21.34
19990430	BB5	5.86	9.06	27.51	21.26
19990430	BB5	5.24	9.13	27.44	21.18
19990430	BB5	4.57	9.15	27.40	21.15
19990430	BB5	3.72	9.20	27.40	21.15
19990430	BB5	3.02	10.45	26.29	20.09
19990430	BB5	2.31	10.66	24.18	18.42
19990430	BB5	1.43	10.92	24.03	18.26
19990430	BB5	0.73	11.21	20.98	15.85
19990430	BB5	0.06	10.88	17.24	13.00
19990430	BB7	69.73	8.45	29.68	23.03
19990430	BB7	69.70	8.44	29.68	23.04
19990430	BB7	69.64	8.45	29.67	23.03
19990430	BB7	69.58	8.45	29.66	23.02
19990430	BB7	69.09	8.42	29.70	23.06

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB7	68.11	8.39	29.67	23.04
19990430	BB7	67.26	8.39	29.65	23.02
19990430	BB7	66.28	8.38	29.65	23.02
19990430	BB7	65.31	8.38	29.65	23.02
19990430	BB7	64.39	8.36	29.64	23.02
19990430	BB7	63.48	8.36	29.65	23.03
19990430	BB7	62.50	8.36	29.66	23.03
19990430	BB7	61.43	8.40	29.65	23.02
19990430	BB7	60.58	8.40	29.64	23.01
19990430	BB7	59.60	8.39	29.64	23.01
19990430	BB7	58.62	8.37	29.63	23.00
19990430	BB7	57.62	8.37	29.63	23.00
19990430	BB7	56.73	8.35	29.65	23.02
19990430	BB7	55.72	8.34	29.62	23.00
19990430	BB7	54.81	8.34	29.58	22.97
19990430	BB7	53.74	8.36	29.61	23.00
19990430	BB7	52.92	8.39	29.61	22.99
19990430	BB7	51.94	8.42	29.61	22.98
19990430	BB7	50.93	8.44	29.60	22.98
19990430	BB7	49.96	8.48	29.64	23.00
19990430	BB7	48.89	8.50	29.61	22.97
19990430	BB7	47.94	8.49	29.61	22.97
19990430	BB7	47.06	8.45	29.61	22.98
19990430	BB7	46.11	8.45	29.60	22.97
19990430	BB7	45.16	8.46	29.59	22.96
19990430	BB7	44.22	8.43	29.60	22.97
19990430	BB7	43.39	8.43	29.58	22.96
19990430	BB7	42.36	8.46	29.58	22.96
19990430	BB7	41.35	8.46	29.59	22.97
19990430	BB7	40.31	8.44	29.59	22.97
19990430	BB7	39.40	8.40	29.57	22.96
19990430	BB7	38.33	8.35	29.57	22.97
19990430	BB7	37.41	8.30	29.52	22.93
19990430	BB7	36.01	8.28	29.52	22.93
19990430	BB7	34.57	8.27	29.50	22.92
19990430	BB7	32.96	8.27	29.50	22.92
19990430	BB7	31.49	8.28	29.48	22.90
19990430	BB7	30.00	8.27	29.49	22.91
19990430	BB7	28.53	8.22	29.44	22.88
19990430	BB7	27.13	8.23	29.40	22.85
19990430	BB7	25.63	8.21	29.39	22.84
19990430	BB7	24.14	8.20	29.35	22.82
19990430	BB7	22.67	8.17	29.25	22.74
19990430	BB7	21.27	8.14	29.20	22.70
19990430	BB7	19.86	8.14	29.16	22.67
19990430	BB7	18.31	8.12	29.04	22.58
19990430	BB7	16.90	8.16	28.79	22.38
19990430	BB7	15.38	8.28	28.39	22.05

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB7	13.88	8.51	27.94	21.67
19990430	BB7	12.33	8.56	27.84	21.58
19990430	BB7	10.80	8.71	27.62	21.39
19990430	BB7	9.21	8.73	27.61	21.38
19990430	BB7	7.69	8.79	27.53	21.31
19990430	BB7	5.86	8.99	27.36	21.14
19990430	BB7	4.39	9.17	27.19	20.99
19990430	BB7	3.11	9.78	26.67	20.49
19990430	BB7	2.38	10.53	24.42	18.63
19990430	BB7	1.28	10.94	23.64	17.95
19990430	BB7	0.24	11.06	18.59	14.03
19990430	BB7	0.00	11.26	17.31	13.00
19990430	BB8	100.74	9.45	30.13	23.24
19990430	BB8	100.68	9.45	30.12	23.23
19990430	BB8	100.59	9.44	30.15	23.26
19990430	BB8	99.82	9.44	30.14	23.25
19990430	BB8	98.85	9.39	30.11	23.23
19990430	BB8	97.72	9.31	30.09	23.23
19990430	BB8	96.56	9.30	30.05	23.20
19990430	BB8	95.28	9.23	30.02	23.19
19990430	BB8	93.78	9.19	29.99	23.17
19990430	BB8	92.50	9.16	29.99	23.17
19990430	BB8	91.13	9.12	29.98	23.17
19990430	BB8	89.88	9.01	29.95	23.16
19990430	BB8	88.62	8.95	29.91	23.14
19990430	BB8	87.43	8.90	29.86	23.11
19990430	BB8	86.18	8.83	29.83	23.10
19990430	BB8	84.96	8.80	29.80	23.08
19990430	BB8	83.62	8.75	29.77	23.06
19990430	BB8	82.37	8.74	29.78	23.07
19990430	BB8	80.87	8.70	29.77	23.07
19990430	BB8	79.59	8.67	29.78	23.08
19990430	BB8	78.22	8.63	29.76	23.07
19990430	BB8	76.72	8.59	29.74	23.07
19990430	BB8	75.50	8.57	29.72	23.05
19990430	BB8	74.07	8.57	29.73	23.05
19990430	BB8	72.69	8.48	29.70	23.04
19990430	BB8	71.35	8.46	29.68	23.03
19990430	BB8	69.92	8.45	29.68	23.04
19990430	BB8	68.51	8.45	29.67	23.03
19990430	BB8	67.17	8.43	29.67	23.03
19990430	BB8	65.73	8.37	29.66	23.03
19990430	BB8	64.42	8.34	29.62	23.00
19990430	BB8	63.05	8.31	29.62	23.01
19990430	BB8	61.71	8.35	29.61	23.00
19990430	BB8	60.36	8.36	29.60	22.99
19990430	BB8	59.08	8.34	29.62	23.00

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB8	57.74	8.32	29.61	23.00
19990430	BB8	56.46	8.31	29.60	22.99
19990430	BB8	55.17	8.33	29.61	23.00
19990430	BB8	53.77	8.44	29.58	22.96
19990430	BB8	52.31	8.52	29.62	22.98
19990430	BB8	50.90	8.51	29.63	22.99
19990430	BB8	49.41	8.49	29.62	22.99
19990430	BB8	48.09	8.48	29.58	22.96
19990430	BB8	46.69	8.47	29.58	22.96
19990430	BB8	45.29	8.46	29.58	22.95
19990430	BB8	43.91	8.45	29.56	22.95
19990430	BB8	42.42	8.42	29.56	22.95
19990430	BB8	40.89	8.40	29.54	22.93
19990430	BB8	39.61	8.38	29.55	22.94
19990430	BB8	38.02	8.38	29.55	22.94
19990430	BB8	36.56	8.39	29.53	22.93
19990430	BB8	35.15	8.38	29.54	22.93
19990430	BB8	33.75	8.35	29.53	22.93
19990430	BB8	32.22	8.33	29.49	22.91
19990430	BB8	30.85	8.29	29.50	22.92
19990430	BB8	29.42	8.30	29.45	22.88
19990430	BB8	28.04	8.26	29.40	22.85
19990430	BB8	26.73	8.24	29.39	22.84
19990430	BB8	25.48	8.23	29.36	22.82
19990430	BB8	24.17	8.21	29.35	22.81
19990430	BB8	22.79	8.18	29.28	22.76
19990430	BB8	21.36	8.16	29.21	22.71
19990430	BB8	19.92	8.13	29.08	22.61
19990430	BB8	18.43	8.14	28.99	22.54
19990430	BB8	16.96	8.12	28.81	22.40
19990430	BB8	15.62	8.24	28.53	22.16
19990430	BB8	14.00	8.29	28.17	21.88
19990430	BB8	12.54	8.53	27.91	21.64
19990430	BB8	11.14	8.58	27.79	21.54
19990430	BB8	9.67	8.61	27.71	21.47
19990430	BB8	8.11	8.90	27.39	21.18
19990430	BB8	6.65	8.99	27.31	21.11
19990430	BB8	5.24	9.08	27.20	21.01
19990430	BB8	3.66	9.28	27.04	20.85
19990430	BB8	2.28	10.37	25.49	19.48
19990430	BB8	0.97	10.97	24.09	18.30
19990430	BB8	0.73	11.14	23.32	17.67
19990430	BB8	0.12	11.32	21.22	16.02
19990430	BB9	89.78	9.06	29.95	23.16
19990430	BB9	89.75	9.07	29.94	23.15
19990430	BB9	89.51	9.10	29.92	23.13
19990430	BB9	88.53	8.99	29.94	23.16

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB9	87.25	8.90	29.87	23.12
19990430	BB9	86.18	8.86	29.86	23.12
19990430	BB9	84.96	8.81	29.84	23.11
19990430	BB9	83.77	8.71	29.78	23.08
19990430	BB9	82.55	8.70	29.78	23.08
19990430	BB9	81.42	8.71	29.76	23.06
19990430	BB9	80.11	8.72	29.76	23.06
19990430	BB9	78.92	8.68	29.78	23.08
19990430	BB9	77.64	8.65	29.80	23.10
19990430	BB9	76.45	8.57	29.73	23.06
19990430	BB9	75.26	8.55	29.72	23.05
19990430	BB9	73.97	8.54	29.70	23.04
19990430	BB9	72.57	8.52	29.72	23.06
19990430	BB9	71.41	8.54	29.71	23.05
19990430	BB9	70.07	8.45	29.72	23.07
19990430	BB9	68.85	8.44	29.68	23.04
19990430	BB9	67.57	8.44	29.68	23.04
19990430	BB9	66.28	8.42	29.69	23.04
19990430	BB9	65.06	8.42	29.67	23.03
19990430	BB9	63.72	8.42	29.66	23.03
19990430	BB9	62.50	8.41	29.67	23.03
19990430	BB9	61.34	8.38	29.65	23.03
19990430	BB9	59.97	8.34	29.68	23.05
19990430	BB9	58.71	8.31	29.65	23.03
19990430	BB9	57.40	8.30	29.61	23.00
19990430	BB9	56.24	8.34	29.61	23.00
19990430	BB9	54.90	8.35	29.60	22.99
19990430	BB9	53.74	8.32	29.63	23.02
19990430	BB9	52.64	8.32	29.61	23.00
19990430	BB9	51.51	8.32	29.60	23.00
19990430	BB9	50.23	8.33	29.60	22.99
19990430	BB9	49.07	8.41	29.56	22.95
19990430	BB9	47.67	8.50	29.60	22.96
19990430	BB9	46.51	8.52	29.60	22.97
19990430	BB9	45.16	8.48	29.61	22.98
19990430	BB9	43.91	8.46	29.62	22.99
19990430	BB9	42.66	8.47	29.59	22.96
19990430	BB9	41.38	8.46	29.59	22.97
19990430	BB9	40.10	8.44	29.58	22.96
19990430	BB9	38.82	8.43	29.57	22.95
19990430	BB9	37.60	8.43	29.57	22.95
19990430	BB9	36.25	8.41	29.56	22.95
19990430	BB9	35.09	8.38	29.56	22.95
19990430	BB9	33.69	8.36	29.53	22.93
19990430	BB9	32.35	8.30	29.51	22.93
19990430	BB9	31.22	8.29	29.50	22.92
19990430	BB9	29.87	8.26	29.48	22.90
19990430	BB9	28.65	8.23	29.46	22.90

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	BB9	27.31	8.23	29.41	22.86
19990430	BB9	26.03	8.22	29.40	22.85
19990430	BB9	24.66	8.21	29.33	22.80
19990430	BB9	23.40	8.18	29.25	22.74
19990430	BB9	22.09	8.16	29.23	22.73
19990430	BB9	20.87	8.14	29.18	22.69
19990430	BB9	19.68	8.12	29.10	22.63
19990430	BB9	18.46	8.12	28.96	22.52
19990430	BB9	17.09	8.19	28.76	22.36
19990430	BB9	15.87	8.30	28.44	22.08
19990430	BB9	14.52	8.47	27.99	21.71
19990430	BB9	13.24	8.48	27.94	21.67
19990430	BB9	11.87	8.50	27.91	21.65
19990430	BB9	10.62	8.54	27.82	21.57
19990430	BB9	9.40	8.66	27.65	21.42
19990430	BB9	7.99	8.73	27.56	21.34
19990430	BB9	6.65	8.84	27.44	21.23
19990430	BB9	5.40	8.90	27.39	21.18
19990430	BB9	4.02	9.13	27.19	20.99
19990430	BB9	2.56	10.11	26.25	20.11
19990430	BB9	1.40	10.79	23.73	18.05
19990430	BB9	0.48	11.33	19.74	14.87
19990430	BB9	0.00	11.27	18.64	14.04
19990430	FC1	25.36	8.12	29.23	22.73
19990430	FC1	25.21	8.12	29.22	22.72
19990430	FC1	25.24	8.11	29.22	22.73
19990430	FC1	25.27	8.11	29.21	22.72
19990430	FC1	25.21	8.11	29.22	22.72
19990430	FC1	24.75	8.12	29.22	22.72
19990430	FC1	24.17	8.10	29.21	22.72
19990430	FC1	23.29	8.12	29.16	22.67
19990430	FC1	22.55	8.12	29.14	22.66
19990430	FC1	21.82	8.11	29.12	22.65
19990430	FC1	21.03	8.11	29.08	22.61
19990430	FC1	20.36	8.11	29.08	22.61
19990430	FC1	19.75	8.12	29.06	22.60
19990430	FC1	19.11	8.12	29.04	22.58
19990430	FC1	18.37	8.15	28.94	22.50
19990430	FC1	17.67	8.15	28.89	22.46
19990430	FC1	16.91	8.15	28.87	22.44
19990430	FC1	16.33	8.17	28.82	22.40
19990430	FC1	15.60	8.17	28.81	22.39
19990430	FC1	14.77	8.17	28.77	22.36
19990430	FC1	14.07	8.23	28.65	22.26
19990430	FC1	13.49	8.22	28.53	22.17
19990430	FC1	12.61	8.30	28.43	22.08
19990430	FC1	11.93	8.32	28.41	22.06

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	FC1	11.26	8.47	28.20	21.88
19990430	FC1	10.56	8.54	28.11	21.79
19990430	FC1	9.83	8.93	27.77	21.47
19990430	FC1	9.00	8.99	27.54	21.28
19990430	FC1	8.15	9.09	27.46	21.21
19990430	FC1	7.48	9.16	27.40	21.16
19990430	FC1	6.75	9.41	27.21	20.97
19990430	FC1	5.95	9.54	27.04	20.82
19990430	FC1	5.31	9.71	26.80	20.60
19990430	FC1	4.58	10.26	26.24	20.08
19990430	FC1	3.85	10.88	25.51	19.42
19990430	FC1	3.14	11.03	24.81	18.85
19990430	FC1	2.41	11.49	22.75	17.18
19990430	FC1	1.56	11.61	17.97	13.46
19990430	FC1	1.01	11.64	17.51	13.11
19990430	FC1	0.24	11.52	17.36	13.01
19990430	FC2	24.87	8.11	29.10	22.63
19990430	FC2	24.75	8.11	29.10	22.63
19990430	FC2	24.69	8.11	29.10	22.63
19990430	FC2	24.72	8.11	29.10	22.63
19990430	FC2	24.87	8.12	29.09	22.62
19990430	FC2	24.32	8.11	29.10	22.63
19990430	FC2	23.65	8.11	29.07	22.61
19990430	FC2	22.46	8.11	29.05	22.59
19990430	FC2	21.39	8.10	29.02	22.57
19990430	FC2	20.97	8.11	28.99	22.55
19990430	FC2	20.30	8.11	28.92	22.49
19990430	FC2	19.62	8.11	28.91	22.48
19990430	FC2	19.01	8.14	28.78	22.38
19990430	FC2	18.16	8.16	28.71	22.32
19990430	FC2	17.61	8.17	28.69	22.30
19990430	FC2	17.03	8.18	28.63	22.25
19990430	FC2	16.48	8.17	28.61	22.24
19990430	FC2	15.90	8.19	28.57	22.20
19990430	FC2	15.29	8.21	28.51	22.15
19990430	FC2	14.80	8.21	28.47	22.12
19990430	FC2	14.25	8.23	28.41	22.07
19990430	FC2	13.49	8.26	28.35	22.02
19990430	FC2	12.91	8.28	28.27	21.96
19990430	FC2	12.33	8.33	28.21	21.90
19990430	FC2	11.72	8.38	28.12	21.83
19990430	FC2	11.11	8.50	27.98	21.70
19990430	FC2	10.47	8.66	27.72	21.47
19990430	FC2	9.80	8.92	27.40	21.18
19990430	FC2	9.22	8.97	27.37	21.15
19990430	FC2	8.61	9.04	27.31	21.10
19990430	FC2	8.09	9.13	27.23	21.03

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	FC2	7.45	9.21	27.18	20.97
19990430	FC2	6.87	9.36	27.07	20.86
19990430	FC2	6.17	9.52	26.91	20.72
19990430	FC2	5.59	9.92	26.48	20.32
19990430	FC2	4.88	10.39	25.87	19.78
19990430	FC2	4.36	10.80	25.39	19.34
19990430	FC2	3.82	10.84	25.29	19.25
19990430	FC2	3.24	11.08	24.93	18.94
19990430	FC2	2.59	11.64	23.19	17.50
19990430	FC2	1.86	11.61	21.85	16.46
19990430	FC2	1.19	11.67	18.29	13.70
19990430	FC2	0.58	11.58	17.06	12.76
19990430	FC2	0.00	11.55	16.18	12.09
19990430	FC3	24.78	8.12	29.08	22.61
19990430	FC3	24.69	8.11	29.08	22.62
19990430	FC3	24.29	8.12	29.06	22.60
19990430	FC3	23.87	8.12	29.03	22.58
19990430	FC3	23.16	8.11	29.02	22.57
19990430	FC3	22.31	8.11	29.00	22.55
19990430	FC3	21.46	8.11	29.02	22.57
19990430	FC3	20.69	8.12	28.98	22.53
19990430	FC3	19.99	8.10	28.94	22.50
19990430	FC3	19.26	8.13	28.83	22.42
19990430	FC3	18.46	8.16	28.63	22.25
19990430	FC3	17.73	8.18	28.56	22.20
19990430	FC3	16.85	8.20	28.47	22.13
19990430	FC3	16.21	8.20	28.45	22.11
19990430	FC3	15.35	8.20	28.42	22.08
19990430	FC3	14.59	8.21	28.41	22.07
19990430	FC3	13.73	8.23	28.32	22.00
19990430	FC3	13.06	8.28	28.25	21.94
19990430	FC3	12.24	8.29	28.25	21.94
19990430	FC3	11.57	8.42	28.13	21.83
19990430	FC3	10.71	8.68	27.84	21.56
19990430	FC3	9.92	8.73	27.63	21.39
19990430	FC3	9.16	8.88	27.43	21.21
19990430	FC3	8.36	8.98	27.32	21.12
19990430	FC3	7.60	9.05	27.24	21.04
19990430	FC3	6.99	9.12	27.21	21.01
19990430	FC3	6.07	9.30	27.06	20.87
19990430	FC3	5.34	10.13	26.29	20.14
19990430	FC3	4.58	10.41	25.84	19.75
19990430	FC3	3.69	10.72	25.54	19.46
19990430	FC3	2.87	11.28	24.57	18.63
19990430	FC3	2.05	11.77	23.36	17.60
19990430	FC3	1.25	11.77	19.65	14.74
19990430	FC3	0.58	11.72	18.11	13.55

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990430	FC3	0.03	11.62	16.98	12.70
19990722	BB1	25.76	9.36	28.55	22.02
19990722	BB1	25.70	9.35	28.54	22.01
19990722	BB1	25.61	9.36	28.55	22.02
19990722	BB1	25.67	9.35	28.53	22.00
19990722	BB1	25.33	9.36	28.53	22.00
19990722	BB1	24.93	9.37	28.52	21.99
19990722	BB1	24.36	9.38	28.53	22.00
19990722	BB1	23.87	9.40	28.52	21.99
19990722	BB1	23.38	9.40	28.51	21.99
19990722	BB1	22.74	9.41	28.49	21.97
19990722	BB1	22.31	9.48	28.43	21.91
19990722	BB1	21.73	9.53	28.36	21.85
19990722	BB1	21.12	9.56	28.32	21.81
19990722	BB1	20.60	9.59	28.28	21.78
19990722	BB1	20.20	9.62	28.24	21.74
19990722	BB1	19.69	9.66	28.20	21.70
19990722	BB1	19.14	9.74	28.08	21.59
19990722	BB1	18.62	9.75	28.05	21.57
19990722	BB1	18.13	9.74	28.05	21.57
19990722	BB1	17.64	9.75	28.04	21.56
19990722	BB1	17.27	9.76	28.01	21.54
19990722	BB1	16.60	9.78	27.92	21.46
19990722	BB1	16.15	9.81	27.69	21.28
19990722	BB1	15.60	9.77	27.57	21.20
19990722	BB1	15.11	9.75	27.39	21.06
19990722	BB1	14.59	9.74	27.02	20.77
19990722	BB1	14.01	9.74	27.03	20.77
19990722	BB1	13.49	9.75	26.92	20.69
19990722	BB1	12.94	9.78	26.78	20.57
19990722	BB1	12.39	9.95	26.23	20.12
19990722	BB1	11.96	10.07	25.87	19.82
19990722	BB1	11.41	10.12	25.81	19.77
19990722	BB1	10.93	10.11	25.85	19.80
19990722	BB1	10.35	10.11	25.94	19.87
19990722	BB1	9.86	10.63	25.16	19.18
19990722	BB1	9.37	10.87	24.64	18.74
19990722	BB1	8.82	11.12	23.64	17.93
19990722	BB1	8.30	11.31	22.88	17.31
19990722	BB1	7.78	11.55	21.00	15.82
19990722	BB1	7.23	11.67	20.75	15.61
19990722	BB1	6.65	11.73	20.24	15.20
19990722	BB1	6.17	11.84	19.40	14.53
19990722	BB1	5.62	12.09	18.98	14.17
19990722	BB1	5.13	12.36	18.10	13.45
19990722	BB1	4.52	12.49	13.23	9.67
19990722	BB1	3.97	12.88	7.25	5.00

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB1	3.42	13.14	6.48	4.37
19990722	BB1	2.87	13.22	6.01	4.00
19990722	BB1	2.26	13.21	5.92	3.93
19990722	BB1	1.83	12.84	5.54	3.69
19990722	BB1	1.34	12.61	5.42	3.63
19990722	BB1	0.64	12.51	5.05	3.36
19990722	BB1	0.24	12.00	1.39	0.58
19990722	BB2	30.43	9.37	28.73	22.16
19990722	BB2	30.40	9.36	28.74	22.16
19990722	BB2	30.40	9.37	28.75	22.18
19990722	BB2	30.34	9.37	28.72	22.15
19990722	BB2	30.15	9.37	28.72	22.15
19990722	BB2	29.79	9.34	28.73	22.16
19990722	BB2	29.02	9.29	28.70	22.15
19990722	BB2	28.48	9.30	28.68	22.13
19990722	BB2	28.11	9.29	28.64	22.10
19990722	BB2	27.56	9.29	28.63	22.09
19990722	BB2	27.13	9.32	28.63	22.09
19990722	BB2	26.61	9.32	28.57	22.04
19990722	BB2	26.03	9.35	28.56	22.03
19990722	BB2	25.51	9.40	28.56	22.02
19990722	BB2	25.03	9.45	28.56	22.02
19990722	BB2	24.48	9.48	28.54	21.99
19990722	BB2	24.08	9.45	28.49	21.96
19990722	BB2	23.59	9.43	28.50	21.97
19990722	BB2	23.07	9.43	28.46	21.94
19990722	BB2	22.58	9.45	28.44	21.92
19990722	BB2	22.22	9.49	28.42	21.90
19990722	BB2	21.82	9.49	28.38	21.87
19990722	BB2	21.27	9.58	28.30	21.79
19990722	BB2	20.94	9.63	28.26	21.76
19990722	BB2	20.36	9.65	28.21	21.71
19990722	BB2	19.87	9.65	28.20	21.70
19990722	BB2	19.47	9.68	28.16	21.66
19990722	BB2	18.92	9.68	28.08	21.60
19990722	BB2	18.53	9.70	28.00	21.54
19990722	BB2	18.04	9.73	27.93	21.48
19990722	BB2	17.52	9.76	27.74	21.33
19990722	BB2	17.09	9.81	27.51	21.14
19990722	BB2	16.51	9.85	27.46	21.10
19990722	BB2	16.11	9.89	27.37	21.02
19990722	BB2	15.63	9.92	27.32	20.98
19990722	BB2	15.11	9.92	27.27	20.94
19990722	BB2	14.56	9.97	27.14	20.82
19990722	BB2	14.07	10.02	26.98	20.69
19990722	BB2	13.55	10.06	26.76	20.52
19990722	BB2	13.06	10.11	26.68	20.45

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB2	12.51	10.13	26.59	20.37
19990722	BB2	12.03	10.26	26.34	20.16
19990722	BB2	11.51	10.45	26.02	19.88
19990722	BB2	10.90	10.49	25.93	19.81
19990722	BB2	10.41	10.60	25.62	19.55
19990722	BB2	9.98	10.63	25.48	19.44
19990722	BB2	9.46	10.71	25.18	19.19
19990722	BB2	8.79	10.76	24.93	18.99
19990722	BB2	8.48	10.91	24.17	18.37
19990722	BB2	7.94	11.33	22.30	16.86
19990722	BB2	7.33	11.46	21.29	16.05
19990722	BB2	6.78	11.54	20.58	15.49
19990722	BB2	6.35	11.62	20.35	15.30
19990722	BB2	5.86	11.93	19.49	14.59
19990722	BB2	5.37	12.23	18.31	13.63
19990722	BB2	4.88	12.44	16.88	12.50
19990722	BB2	4.33	12.61	9.71	6.94
19990722	BB2	3.85	13.08	6.61	4.48
19990722	BB2	3.30	13.24	6.11	4.08
19990722	BB2	2.78	13.22	5.94	3.94
19990722	BB2	2.38	12.83	5.71	3.82
19990722	BB2	1.77	12.53	5.41	3.63
19990722	BB2	1.16	12.15	4.49	2.97
19990722	BB2	0.73	12.19	4.20	2.74
19990722	BB2	0.18	12.46	4.07	2.61
19990722	BB3	6.23	11.98	19.39	14.51
19990722	BB3	6.17	11.98	19.40	14.51
19990722	BB3	6.17	11.97	19.40	14.51
19990722	BB3	6.10	11.97	19.38	14.50
19990722	BB3	5.74	12.11	19.05	14.22
19990722	BB3	5.43	12.31	17.94	13.33
19990722	BB3	4.88	12.41	17.42	12.92
19990722	BB3	4.52	13.02	9.31	6.57
19990722	BB3	4.06	13.08	6.44	4.35
19990722	BB3	3.57	13.12	5.90	3.93
19990722	BB3	3.33	13.10	5.87	3.91
19990722	BB3	2.90	13.06	5.85	3.90
19990722	BB3	2.50	12.92	5.71	3.81
19990722	BB3	2.08	12.87	5.57	3.71
19990722	BB3	1.68	12.46	5.46	3.68
19990722	BB3	1.19	11.81	3.77	2.45
19990722	BB3	0.79	11.49	3.35	2.17
19990722	BB3	0.24	10.96	2.07	1.23
19990722	BB4	8.15	11.59	21.25	16.00
19990722	BB4	8.12	11.59	21.22	15.98
19990722	BB4	8.12	11.59	21.22	15.98
19990722	BB4	8.06	11.59	21.24	16.00

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB4	8.06	11.57	21.26	16.01
19990722	BB4	8.06	11.57	21.28	16.03
19990722	BB4	8.03	11.57	21.27	16.02
19990722	BB4	7.84	11.58	21.13	15.91
19990722	BB4	7.51	11.61	20.97	15.78
19990722	BB4	7.20	11.66	20.74	15.59
19990722	BB4	6.84	11.72	20.33	15.27
19990722	BB4	6.65	11.75	20.23	15.19
19990722	BB4	6.29	11.81	19.96	14.97
19990722	BB4	5.95	11.87	19.80	14.84
19990722	BB4	5.68	12.14	18.51	13.80
19990722	BB4	5.31	12.34	17.79	13.21
19990722	BB4	4.94	12.41	16.96	12.56
19990722	BB4	4.64	12.69	11.08	7.98
19990722	BB4	4.40	13.05	7.49	5.17
19990722	BB4	3.97	13.13	6.58	4.45
19990722	BB4	3.60	13.16	6.55	4.42
19990722	BB4	3.24	13.21	6.14	4.10
19990722	BB4	2.96	13.21	6.11	4.08
19990722	BB4	2.56	13.23	6.08	4.06
19990722	BB4	2.11	13.27	5.98	3.97
19990722	BB4	1.77	13.08	5.87	3.91
19990722	BB4	1.43	12.57	5.38	3.60
19990722	BB4	1.04	12.43	5.06	3.38
19990722	BB4	0.61	10.95	3.05	2.00
19990722	BB5	8.82	11.18	24.39	18.50
19990722	BB5	8.79	11.04	24.55	18.65
19990722	BB5	8.67	11.54	23.57	17.81
19990722	BB5	8.48	11.68	22.11	16.66
19990722	BB5	8.30	11.69	20.50	15.41
19990722	BB5	8.18	11.69	20.33	15.28
19990722	BB5	7.94	11.67	20.26	15.22
19990722	BB5	7.63	11.67	20.27	15.23
19990722	BB5	7.33	11.70	20.25	15.21
19990722	BB5	6.90	11.72	20.26	15.22
19990722	BB5	6.38	11.81	20.04	15.04
19990722	BB5	6.04	11.87	19.81	14.85
19990722	BB5	5.56	11.97	19.49	14.58
19990722	BB5	5.16	12.14	18.76	13.99
19990722	BB5	4.61	12.35	17.92	13.31
19990722	BB5	4.21	13.09	8.11	5.64
19990722	BB5	3.91	13.30	5.98	3.96
19990722	BB5	3.45	13.25	5.97	3.96
19990722	BB5	3.11	13.23	5.87	3.89
19990722	BB5	2.69	12.57	5.35	3.58
19990722	BB5	2.14	12.36	4.87	3.24
19990722	BB5	1.83	12.36	4.88	3.25

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB5	1.28	12.46	4.86	3.22
19990722	BB5	0.92	12.50	4.78	3.15
19990722	BB5	0.43	12.26	4.54	3.00
19990722	BB5	0.12	12.65	1.79	0.82
19990722	BB7	46.70	8.79	29.04	22.48
19990722	BB7	46.57	8.79	29.01	22.46
19990722	BB7	46.33	8.79	29.02	22.47
19990722	BB7	46.08	8.80	29.02	22.47
19990722	BB7	45.69	8.80	29.00	22.46
19990722	BB7	45.26	8.83	29.01	22.45
19990722	BB7	44.99	8.83	29.01	22.46
19990722	BB7	44.68	8.85	29.00	22.45
19990722	BB7	44.28	8.85	29.01	22.46
19990722	BB7	43.89	8.84	29.01	22.45
19990722	BB7	43.58	8.83	29.02	22.46
19990722	BB7	43.09	8.84	29.01	22.46
19990722	BB7	42.79	8.84	29.00	22.45
19990722	BB7	42.42	8.84	29.00	22.45
19990722	BB7	42.09	8.84	28.99	22.44
19990722	BB7	41.66	8.83	28.97	22.43
19990722	BB7	41.26	8.82	28.98	22.44
19990722	BB7	40.87	8.83	28.94	22.40
19990722	BB7	40.35	8.86	28.92	22.38
19990722	BB7	39.89	8.87	28.92	22.38
19990722	BB7	39.49	8.88	28.91	22.37
19990722	BB7	38.94	8.90	28.91	22.37
19990722	BB7	38.55	8.93	28.90	22.36
19990722	BB7	38.18	8.95	28.89	22.34
19990722	BB7	37.78	8.97	28.88	22.34
19990722	BB7	37.45	8.99	28.86	22.32
19990722	BB7	36.81	9.02	28.82	22.28
19990722	BB7	36.56	9.04	28.81	22.27
19990722	BB7	36.01	9.04	28.82	22.27
19990722	BB7	35.62	9.06	28.81	22.26
19990722	BB7	35.10	9.07	28.80	22.26
19990722	BB7	34.49	9.12	28.79	22.24
19990722	BB7	34.03	9.14	28.77	22.23
19990722	BB7	33.57	9.15	28.76	22.22
19990722	BB7	33.02	9.16	28.76	22.21
19990722	BB7	32.60	9.21	28.75	22.20
19990722	BB7	31.92	9.26	28.72	22.17
19990722	BB7	31.50	9.31	28.75	22.19
19990722	BB7	31.25	9.39	28.73	22.16
19990722	BB7	30.52	9.38	28.71	22.14
19990722	BB7	29.97	9.34	28.72	22.15
19990722	BB7	29.39	9.30	28.70	22.15
19990722	BB7	28.87	9.31	28.66	22.11

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB7	28.26	9.30	28.63	22.09
19990722	BB7	27.74	9.28	28.63	22.09
19990722	BB7	27.16	9.32	28.61	22.07
19990722	BB7	26.71	9.32	28.56	22.04
19990722	BB7	26.13	9.32	28.55	22.02
19990722	BB7	25.51	9.32	28.54	22.01
19990722	BB7	25.03	9.36	28.53	22.01
19990722	BB7	24.60	9.39	28.53	22.00
19990722	BB7	23.93	9.44	28.53	21.99
19990722	BB7	23.38	9.48	28.52	21.98
19990722	BB7	22.98	9.46	28.46	21.93
19990722	BB7	22.28	9.49	28.39	21.88
19990722	BB7	21.70	9.52	28.35	21.83
19990722	BB7	21.09	9.54	28.33	21.82
19990722	BB7	20.54	9.64	28.22	21.72
19990722	BB7	20.02	9.66	28.15	21.66
19990722	BB7	19.56	9.68	28.09	21.61
19990722	BB7	18.98	9.69	28.03	21.56
19990722	BB7	18.37	9.72	27.96	21.51
19990722	BB7	17.88	9.72	27.91	21.47
19990722	BB7	17.34	9.73	27.86	21.42
19990722	BB7	16.82	9.77	27.65	21.25
19990722	BB7	16.27	9.78	27.57	21.19
19990722	BB7	15.81	9.70	27.38	21.06
19990722	BB7	15.26	9.89	27.31	20.97
19990722	BB7	14.71	9.91	27.23	20.90
19990722	BB7	14.13	9.78	27.00	20.75
19990722	BB7	13.55	9.86	26.84	20.61
19990722	BB7	13.06	9.90	26.66	20.46
19990722	BB7	12.51	9.98	26.52	20.34
19990722	BB7	11.93	10.10	26.53	20.34
19990722	BB7	11.35	10.18	26.43	20.24
19990722	BB7	10.77	10.44	25.98	19.86
19990722	BB7	10.26	10.60	25.46	19.43
19990722	BB7	9.71	10.71	25.17	19.18
19990722	BB7	9.10	10.81	24.68	18.78
19990722	BB7	8.48	11.06	23.56	17.87
19990722	BB7	7.87	11.26	22.53	17.05
19990722	BB7	7.33	11.47	21.59	16.28
19990722	BB7	6.71	11.68	20.56	15.45
19990722	BB7	6.32	11.88	19.71	14.77
19990722	BB7	5.56	12.02	18.97	14.17
19990722	BB7	5.19	12.34	17.85	13.25
19990722	BB7	4.55	12.55	14.86	10.92
19990722	BB7	3.91	13.05	7.80	5.40
19990722	BB7	3.48	13.18	6.20	4.15
19990722	BB7	2.99	12.84	5.88	3.95
19990722	BB7	2.38	12.38	5.36	3.62

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB7	1.95	11.99	4.86	3.28
19990722	BB7	1.37	11.91	4.15	2.74
19990722	BB7	0.92	11.67	3.50	2.26
19990722	BB7	0.49	11.75	3.05	1.90
19990722	BB8	50.97	8.69	29.11	22.55
19990722	BB8	50.94	8.69	29.10	22.55
19990722	BB8	50.88	8.68	29.11	22.56
19990722	BB8	50.88	8.69	29.10	22.55
19990722	BB8	50.78	8.69	29.12	22.56
19990722	BB8	50.88	8.68	29.12	22.56
19990722	BB8	50.66	8.71	29.09	22.54
19990722	BB8	50.33	8.72	29.07	22.52
19990722	BB8	49.96	8.72	29.08	22.53
19990722	BB8	49.50	8.77	29.06	22.51
19990722	BB8	48.95	8.75	29.08	22.52
19990722	BB8	48.56	8.76	29.04	22.49
19990722	BB8	47.98	8.76	29.05	22.50
19990722	BB8	47.52	8.78	29.04	22.49
19990722	BB8	47.15	8.79	29.05	22.49
19990722	BB8	46.76	8.81	29.02	22.47
19990722	BB8	46.15	8.86	29.01	22.46
19990722	BB8	45.84	8.86	29.03	22.47
19990722	BB8	45.35	8.87	29.01	22.45
19990722	BB8	44.86	8.86	29.02	22.46
19990722	BB8	44.47	8.87	29.02	22.46
19990722	BB8	43.98	8.88	28.99	22.43
19990722	BB8	43.55	8.89	28.98	22.42
19990722	BB8	43.03	8.92	28.99	22.43
19990722	BB8	42.54	8.93	29.01	22.44
19990722	BB8	42.21	8.89	29.02	22.45
19990722	BB8	41.69	8.88	28.99	22.43
19990722	BB8	41.23	8.86	28.95	22.41
19990722	BB8	40.90	8.90	28.91	22.37
19990722	BB8	40.41	8.93	28.88	22.34
19990722	BB8	39.86	8.95	28.88	22.34
19990722	BB8	39.52	9.00	28.87	22.32
19990722	BB8	38.88	8.99	28.84	22.30
19990722	BB8	38.55	9.00	28.84	22.30
19990722	BB8	37.97	9.02	28.82	22.28
19990722	BB8	37.63	9.04	28.85	22.30
19990722	BB8	37.17	9.13	28.82	22.26
19990722	BB8	36.56	9.10	28.83	22.27
19990722	BB8	36.26	9.11	28.80	22.25
19990722	BB8	35.65	9.11	28.79	22.25
19990722	BB8	35.16	9.14	28.78	22.23
19990722	BB8	34.79	9.19	28.76	22.21
19990722	BB8	34.30	9.21	28.78	22.22

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB8	33.94	9.26	28.78	22.22
19990722	BB8	33.33	9.33	28.81	22.22
19990722	BB8	32.96	9.37	28.75	22.17
19990722	BB8	32.35	9.36	28.73	22.16
19990722	BB8	31.86	9.40	28.74	22.16
19990722	BB8	31.50	9.44	28.72	22.14
19990722	BB8	31.01	9.41	28.75	22.17
19990722	BB8	30.43	9.36	28.67	22.12
19990722	BB8	30.00	9.33	28.65	22.10
19990722	BB8	29.60	9.34	28.63	22.08
19990722	BB8	29.09	9.32	28.63	22.09
19990722	BB8	28.63	9.34	28.61	22.07
19990722	BB8	28.08	9.31	28.62	22.08
19990722	BB8	27.68	9.31	28.55	22.03
19990722	BB8	27.22	9.32	28.56	22.04
19990722	BB8	26.71	9.33	28.57	22.04
19990722	BB8	26.22	9.34	28.54	22.02
19990722	BB8	25.73	9.36	28.52	22.00
19990722	BB8	25.30	9.37	28.51	21.98
19990722	BB8	24.75	9.39	28.50	21.98
19990722	BB8	24.32	9.36	28.47	21.96
19990722	BB8	23.87	9.36	28.44	21.93
19990722	BB8	23.44	9.36	28.41	21.91
19990722	BB8	22.92	9.43	28.38	21.88
19990722	BB8	22.43	9.46	28.37	21.86
19990722	BB8	22.01	9.52	28.31	21.81
19990722	BB8	21.61	9.57	28.29	21.78
19990722	BB8	21.12	9.58	28.27	21.77
19990722	BB8	20.69	9.58	28.28	21.78
19990722	BB8	20.30	9.59	28.27	21.77
19990722	BB8	19.84	9.60	28.25	21.75
19990722	BB8	19.41	9.62	28.18	21.69
19990722	BB8	18.98	9.65	28.12	21.64
19990722	BB8	18.50	9.68	28.05	21.58
19990722	BB8	17.98	9.70	27.98	21.52
19990722	BB8	17.58	9.66	27.87	21.44
19990722	BB8	17.09	9.70	27.78	21.37
19990722	BB8	16.54	9.76	27.73	21.32
19990722	BB8	16.18	9.81	27.62	21.22
19990722	BB8	15.60	9.86	27.49	21.12
19990722	BB8	15.20	9.90	27.31	20.97
19990722	BB8	14.65	9.99	27.12	20.81
19990722	BB8	14.28	10.04	26.93	20.66
19990722	BB8	13.80	10.08	26.87	20.60
19990722	BB8	13.34	10.11	26.78	20.53
19990722	BB8	12.82	10.16	26.73	20.48
19990722	BB8	12.42	10.23	26.51	20.30
19990722	BB8	12.03	10.31	26.36	20.17

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB8	11.48	10.36	26.29	20.10
19990722	BB8	11.11	10.45	26.07	19.92
19990722	BB8	10.71	10.60	25.77	19.66
19990722	BB8	10.32	10.68	25.46	19.41
19990722	BB8	9.77	10.77	25.13	19.14
19990722	BB8	9.43	10.84	24.59	18.71
19990722	BB8	8.85	10.94	24.20	18.39
19990722	BB8	8.36	11.04	23.73	18.01
19990722	BB8	7.94	11.23	22.87	17.32
19990722	BB8	7.39	11.46	21.03	15.85
19990722	BB8	6.90	11.50	20.67	15.57
19990722	BB8	6.53	11.60	20.40	15.35
19990722	BB8	6.04	11.76	19.91	14.94
19990722	BB8	5.43	12.07	19.20	14.35
19990722	BB8	5.04	12.36	18.01	13.38
19990722	BB8	4.55	12.90	14.85	10.85
19990722	BB8	4.03	13.28	7.13	4.85
19990722	BB8	3.48	13.32	6.54	4.39
19990722	BB8	3.17	13.05	6.18	4.16
19990722	BB8	2.69	12.52	5.76	3.90
19990722	BB8	2.01	12.46	5.63	3.81
19990722	BB8	1.62	12.39	5.46	3.69
19990722	BB8	1.10	12.37	5.36	3.62
19990722	BB8	0.89	11.60	5.26	3.64
19990722	BB8	0.55	10.99	2.73	1.74
19990722	BB8	0.43	11.28	2.09	1.21
19990722	BB8	0.18	11.71	1.58	0.76
19990722	BB9	51.36	8.67	29.14	22.58
19990722	BB9	51.27	8.67	29.14	22.58
19990722	BB9	50.66	8.68	29.13	22.57
19990722	BB9	50.08	8.68	29.13	22.57
19990722	BB9	49.53	8.68	29.12	22.57
19990722	BB9	49.01	8.68	29.12	22.57
19990722	BB9	48.37	8.68	29.09	22.54
19990722	BB9	47.79	8.70	29.08	22.53
19990722	BB9	47.24	8.70	29.07	22.52
19990722	BB9	46.60	8.72	29.06	22.52
19990722	BB9	46.18	8.73	29.06	22.51
19990722	BB9	45.54	8.75	29.05	22.50
19990722	BB9	44.83	8.77	29.06	22.50
19990722	BB9	44.47	8.78	29.05	22.50
19990722	BB9	43.83	8.79	29.05	22.49
19990722	BB9	43.15	8.82	29.04	22.48
19990722	BB9	42.67	8.87	29.02	22.46
19990722	BB9	42.06	8.88	29.01	22.45
19990722	BB9	41.57	8.87	29.00	22.44
19990722	BB9	40.99	8.85	28.96	22.41

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB9	40.35	8.86	28.94	22.40
19990722	BB9	39.74	8.91	28.92	22.37
19990722	BB9	39.16	8.93	28.90	22.36
19990722	BB9	38.52	8.97	28.91	22.36
19990722	BB9	37.94	9.01	28.88	22.33
19990722	BB9	37.42	9.05	28.87	22.32
19990722	BB9	36.87	9.07	28.85	22.30
19990722	BB9	36.32	9.07	28.82	22.28
19990722	BB9	35.83	9.08	28.84	22.29
19990722	BB9	35.19	9.10	28.83	22.28
19990722	BB9	34.58	9.12	28.80	22.25
19990722	BB9	34.00	9.16	28.78	22.23
19990722	BB9	33.42	9.18	28.76	22.21
19990722	BB9	32.78	9.27	28.80	22.23
19990722	BB9	32.05	9.38	28.77	22.19
19990722	BB9	31.59	9.40	28.74	22.16
19990722	BB9	31.25	9.42	28.74	22.16
19990722	BB9	30.43	9.42	28.73	22.15
19990722	BB9	29.88	9.37	28.71	22.14
19990722	BB9	29.24	9.34	28.65	22.10
19990722	BB9	28.72	9.32	28.67	22.12
19990722	BB9	28.05	9.29	28.62	22.08
19990722	BB9	27.53	9.30	28.67	22.12
19990722	BB9	27.01	9.34	28.62	22.08
19990722	BB9	26.34	9.33	28.58	22.04
19990722	BB9	25.76	9.30	28.55	22.03
19990722	BB9	25.18	9.29	28.54	22.02
19990722	BB9	24.45	9.30	28.52	22.01
19990722	BB9	23.93	9.44	28.55	22.01
19990722	BB9	23.38	9.46	28.48	21.95
19990722	BB9	22.74	9.48	28.45	21.93
19990722	BB9	22.16	9.49	28.38	21.87
19990722	BB9	21.67	9.50	28.36	21.85
19990722	BB9	21.12	9.54	28.33	21.82
19990722	BB9	20.63	9.54	28.31	21.81
19990722	BB9	19.99	9.55	28.29	21.79
19990722	BB9	19.50	9.57	28.24	21.75
19990722	BB9	18.86	9.63	28.17	21.68
19990722	BB9	18.28	9.67	28.13	21.65
19990722	BB9	17.64	9.70	28.07	21.59
19990722	BB9	17.03	9.70	27.99	21.53
19990722	BB9	16.42	9.70	27.86	21.43
19990722	BB9	15.84	9.71	27.70	21.30
19990722	BB9	15.29	9.74	27.64	21.25
19990722	BB9	14.65	9.78	27.58	21.20
19990722	BB9	14.10	9.84	27.39	21.04
19990722	BB9	13.61	9.93	27.11	20.81
19990722	BB9	12.85	9.97	26.87	20.61

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	BB9	12.33	9.97	26.59	20.40
19990722	BB9	11.78	10.04	26.48	20.30
19990722	BB9	11.11	10.16	26.42	20.24
19990722	BB9	10.56	10.27	26.31	20.13
19990722	BB9	9.89	10.60	25.74	19.64
19990722	BB9	9.28	10.68	25.21	19.22
19990722	BB9	8.67	10.83	24.32	18.50
19990722	BB9	8.24	11.10	22.90	17.36
19990722	BB9	7.57	11.43	20.71	15.61
19990722	BB9	7.08	11.75	19.66	14.75
19990722	BB9	6.41	12.21	18.79	14.00
19990722	BB9	5.86	12.40	18.33	13.62
19990722	BB9	5.37	12.48	17.50	12.96
19990722	BB9	4.82	12.56	14.03	10.28
19990722	BB9	4.15	12.95	7.30	5.03
19990722	BB9	3.63	13.22	6.15	4.11
19990722	BB9	3.02	12.79	5.87	3.95
19990722	BB9	2.72	12.39	5.64	3.83
19990722	BB9	2.56	12.32	5.56	3.78
19990722	BB9	2.32	12.25	5.32	3.60
19990722	BB9	1.92	12.22	5.09	3.43
19990722	BB9	1.65	12.17	4.90	3.28
19990722	BB9	1.19	12.10	3.97	2.57
19990722	BB9	0.79	12.26	3.83	2.45
19990722	BB9	0.46	12.39	2.08	1.07
19990722	FC1	26.58	9.50	28.68	22.10
19990722	FC1	26.43	9.50	28.67	22.09
19990722	FC1	26.25	9.50	28.68	22.10
19990722	FC1	25.91	9.52	28.65	22.08
19990722	FC1	25.64	9.53	28.61	22.04
19990722	FC1	25.03	9.63	28.49	21.93
19990722	FC1	24.48	9.65	28.45	21.89
19990722	FC1	23.84	9.71	28.36	21.82
19990722	FC1	23.20	9.71	28.36	21.82
19990722	FC1	22.55	9.72	28.34	21.80
19990722	FC1	22.16	9.72	28.33	21.79
19990722	FC1	21.49	9.75	28.29	21.75
19990722	FC1	21.00	9.78	28.22	21.70
19990722	FC1	20.30	9.81	28.13	21.62
19990722	FC1	19.87	9.84	28.05	21.56
19990722	FC1	19.26	9.86	27.99	21.51
19990722	FC1	18.65	9.90	27.95	21.47
19990722	FC1	18.10	9.93	27.84	21.38
19990722	FC1	17.43	10.04	27.54	21.12
19990722	FC1	16.88	10.19	27.04	20.72
19990722	FC1	16.30	10.23	26.87	20.58
19990722	FC1	15.69	10.35	26.72	20.44

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	FC1	15.11	10.36	26.50	20.27
19990722	FC1	14.53	10.36	26.43	20.22
19990722	FC1	13.86	10.36	26.37	20.17
19990722	FC1	13.31	10.45	26.28	20.08
19990722	FC1	12.76	10.60	26.03	19.86
19990722	FC1	12.30	10.73	25.72	19.61
19990722	FC1	11.51	10.82	25.51	19.43
19990722	FC1	10.87	10.89	25.27	19.23
19990722	FC1	10.35	11.18	24.67	18.72
19990722	FC1	9.77	11.28	24.45	18.53
19990722	FC1	9.16	11.48	24.21	18.31
19990722	FC1	8.61	11.66	23.92	18.06
19990722	FC1	7.94	11.75	22.59	17.01
19990722	FC1	7.36	11.90	21.57	16.20
19990722	FC1	6.65	12.29	19.31	14.39
19990722	FC1	6.17	13.93	12.49	8.88
19990722	FC1	5.52	14.25	10.81	7.53
19990722	FC1	4.88	14.25	10.13	7.01
19990722	FC1	4.24	13.83	9.60	6.67
19990722	FC1	3.66	13.72	7.84	5.33
19990722	FC1	3.33	13.11	9.49	6.69
19990722	FC1	3.14	12.72	7.47	5.19
19990722	FC1	2.87	12.44	5.67	3.84
19990722	FC1	2.56	11.67	4.20	2.80
19990722	FC1	2.44	11.32	3.46	2.27
19990722	FC1	2.17	11.21	3.19	2.07
19990722	FC1	1.89	11.15	3.13	2.04
19990722	FC1	1.59	11.13	3.10	2.01
19990722	FC1	1.34	11.11	3.05	1.98
19990722	FC1	1.10	11.11	2.89	1.85
19990722	FC2	1.04	12.63	1.93	0.92
19990722	FC2	1.22	10.85	2.30	1.42
19990722	FC2	1.19	10.82	2.68	1.72
19990722	FC2	1.19	10.77	2.89	1.89
19990722	FC2	1.22	10.85	2.86	1.85
19990722	FC2	1.10	10.79	2.90	1.89
19990722	FC2	1.22	10.74	2.83	1.85
19990722	FC2	1.28	10.72	2.77	1.80
19990722	FC2	1.37	10.74	2.74	1.77
19990722	FC2	1.95	10.95	3.29	2.18
19990722	FC2	2.26	11.07	3.41	2.26
19990722	FC2	2.93	11.18	3.58	2.38
19990722	FC2	3.75	11.24	3.71	2.48
19990722	FC2	4.15	11.64	4.00	2.65
19990722	FC2	4.40	12.59	7.68	5.38
19990722	FC2	4.85	13.72	9.77	6.82
19990722	FC2	5.31	13.99	9.97	6.92

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	FC2	5.80	14.28	11.09	7.74
19990722	FC2	6.26	14.09	12.46	8.83
19990722	FC2	6.84	13.79	19.11	13.99
19990722	FC2	7.51	13.05	20.53	15.20
19990722	FC2	8.18	12.23	22.19	16.62
19990722	FC2	8.73	11.93	23.45	17.65
19990722	FC2	9.31	11.82	23.84	17.97
19990722	FC2	9.95	11.45	24.09	18.23
19990722	FC2	10.62	11.31	24.65	18.68
19990722	FC2	12.09	10.92	25.47	19.38
19990722	FC2	12.76	10.83	25.75	19.61
19990722	FC2	13.43	10.65	26.00	19.84
19990722	FC2	14.28	10.48	26.18	20.01
19990722	FC2	15.17	10.42	26.39	20.18
19990722	FC2	15.99	10.38	26.63	20.37
19990722	FC2	17.24	10.27	26.77	20.49
19990722	FC2	18.16	10.14	27.56	21.13
19990722	FC2	18.98	10.01	27.84	21.36
19990722	FC2	19.81	9.95	27.90	21.42
19990722	FC2	20.42	9.88	28.03	21.54
19990722	FC2	21.30	9.85	28.16	21.64
19990722	FC2	22.19	9.82	28.25	21.72
19990722	FC2	22.86	9.78	28.29	21.76
19990722	FC2	23.90	9.71	28.40	21.85
19990722	FC2	24.60	9.70	28.44	21.88
19990722	FC2	25.39	9.67	28.49	21.93
19990722	FC2	26.25	9.62	28.54	21.97
19990722	FC2	27.32	9.58	28.60	22.03
19990722	FC2	27.99	9.53	28.64	22.07
19990722	FC2	28.08	9.52	28.64	22.06
19990722	FC2	28.14	9.53	28.62	22.05
19990722	FC2	28.41	9.52	28.66	22.08
19990722	FC2	29.06	9.53	28.65	22.07
19990722	FC2	29.24	9.52	28.66	22.08
19990722	FC2	29.30	9.52	28.66	22.08
19990722	FC2	30.34	9.50	28.69	22.11
19990722	FC2	31.56	9.49	28.70	22.11
19990722	FC2	31.62	9.42	28.74	22.16
19990722	FC2	31.62	9.41	28.73	22.16
19990722	FC2	31.68	9.40	28.75	22.17
19990722	FC3	22.74	9.81	28.07	21.58
19990722	FC3	22.55	9.81	28.10	21.60
19990722	FC3	22.19	9.84	28.06	21.56
19990722	FC3	21.58	9.88	28.01	21.52
19990722	FC3	21.09	9.91	27.96	21.48
19990722	FC3	20.42	9.92	27.86	21.39
19990722	FC3	19.78	9.95	27.71	21.28

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19990722	FC3	19.17	9.94	27.51	21.12
19990722	FC3	18.50	10.04	27.21	20.87
19990722	FC3	17.82	10.08	27.07	20.76
19990722	FC3	17.27	10.17	26.92	20.62
19990722	FC3	16.60	10.23	26.78	20.51
19990722	FC3	16.11	10.27	26.61	20.37
19990722	FC3	15.38	10.35	26.51	20.27
19990722	FC3	14.80	10.41	26.37	20.16
19990722	FC3	14.16	10.55	26.05	19.89
19990722	FC3	13.58	10.63	25.83	19.70
19990722	FC3	13.00	10.63	25.72	19.62
19990722	FC3	12.39	10.66	25.65	19.56
19990722	FC3	11.66	10.72	25.49	19.43
19990722	FC3	11.08	10.91	25.18	19.15
19990722	FC3	10.44	11.18	24.53	18.61
19990722	FC3	9.71	11.49	24.19	18.29
19990722	FC3	9.16	11.58	23.88	18.04
19990722	FC3	8.42	11.66	23.18	17.49
19990722	FC3	7.72	11.88	22.09	16.60
19990722	FC3	7.14	12.32	17.88	13.28
19990722	FC3	6.50	13.21	13.27	9.59
19990722	FC3	5.74	14.29	11.02	7.69
19990722	FC3	5.13	14.32	10.20	7.05
19990722	FC3	4.55	15.35	9.24	6.14
19990722	FC3	3.91	15.23	8.97	5.95
19990722	FC3	3.54	15.45	8.81	5.79
19990722	FC3	3.27	15.27	8.58	5.65
19990722	FC3	2.93	15.05	8.06	5.29
19990722	FC3	2.56	14.20	6.86	4.50
19990722	FC3	2.20	13.33	6.34	4.24
19990722	FC3	1.92	12.07	5.96	4.12
19990722	FC3	1.56	10.76	2.86	1.87
19990722	FC3	1.22	9.98	2.10	1.35
19991104	BB1	19.75	9.02	29.44	22.76
19991104	BB1	19.38	9.02	29.46	22.78
19991104	BB1	19.01	9.03	29.43	22.75
19991104	BB1	18.53	9.05	29.40	22.73
19991104	BB1	17.95	9.05	29.39	22.72
19991104	BB1	17.43	9.05	29.39	22.72
19991104	BB1	16.66	9.09	29.36	22.69
19991104	BB1	16.11	9.09	29.36	22.69
19991104	BB1	15.44	9.11	29.32	22.66
19991104	BB1	14.86	9.12	29.30	22.64
19991104	BB1	14.13	9.12	29.31	22.65
19991104	BB1	13.52	9.13	29.29	22.63
19991104	BB1	13.00	9.13	29.27	22.62
19991104	BB1	12.27	9.20	29.20	22.55

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB1	11.60	9.26	29.13	22.48
19991104	BB1	11.05	9.29	29.10	22.46
19991104	BB1	10.38	9.36	29.01	22.38
19991104	BB1	9.74	9.37	29.00	22.37
19991104	BB1	9.25	9.38	28.98	22.35
19991104	BB1	8.48	9.39	28.96	22.34
19991104	BB1	7.94	9.38	28.94	22.32
19991104	BB1	7.29	9.35	28.92	22.31
19991104	BB1	6.71	9.34	28.86	22.27
19991104	BB1	5.95	9.23	28.75	22.19
19991104	BB1	5.40	9.22	28.73	22.18
19991104	BB1	4.67	8.88	28.54	22.08
19991104	BB1	4.18	8.64	25.34	19.62
19991104	BB1	3.39	8.63	25.20	19.51
19991104	BB1	2.81	8.59	24.96	19.33
19991104	BB1	2.11	8.50	24.84	19.25
19991104	BB1	1.65	8.47	24.82	19.23
19991104	BB1	1.28	8.43	24.77	19.20
19991104	BB1	0.95	8.42	24.75	19.18
19991104	BB1	0.67	8.41	24.75	19.18
19991104	BB1	0.28	8.41	24.72	19.16
19991104	BB1	0.00	8.42	24.73	19.16
19991104	BB1	0.00	8.41	24.73	19.17
19991104	BB1	0.00	8.26	24.81	19.25
19991104	BB2	49.84	9.30	29.99	23.15
19991104	BB2	49.78	9.30	29.99	23.15
19991104	BB2	49.17	9.31	29.97	23.14
19991104	BB2	48.56	9.30	29.99	23.15
19991104	BB2	47.92	9.28	29.95	23.13
19991104	BB2	47.28	9.27	29.98	23.15
19991104	BB2	46.54	9.28	29.96	23.13
19991104	BB2	45.96	9.28	29.96	23.14
19991104	BB2	45.38	9.27	29.96	23.14
19991104	BB2	44.62	9.27	29.94	23.12
19991104	BB2	44.01	9.27	29.96	23.13
19991104	BB2	43.31	9.27	29.95	23.12
19991104	BB2	42.88	9.26	29.94	23.12
19991104	BB2	42.03	9.24	29.90	23.09
19991104	BB2	41.48	9.20	29.88	23.08
19991104	BB2	40.90	9.20	29.88	23.08
19991104	BB2	40.19	9.17	29.87	23.08
19991104	BB2	39.61	9.15	29.88	23.09
19991104	BB2	38.94	9.15	29.87	23.08
19991104	BB2	38.36	9.15	29.86	23.07
19991104	BB2	37.63	9.14	29.86	23.07
19991104	BB2	37.08	9.15	29.86	23.07
19991104	BB2	36.41	9.15	29.85	23.07

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB2	35.83	9.15	29.86	23.07
19991104	BB2	35.07	9.14	29.86	23.07
19991104	BB2	34.40	9.14	29.84	23.06
19991104	BB2	33.79	9.13	29.85	23.07
19991104	BB2	33.18	9.10	29.83	23.06
19991104	BB2	32.41	9.09	29.80	23.04
19991104	BB2	31.80	9.03	29.79	23.04
19991104	BB2	31.22	9.02	29.75	23.01
19991104	BB2	30.58	9.03	29.74	23.00
19991104	BB2	29.88	9.02	29.73	22.99
19991104	BB2	29.30	9.02	29.73	22.99
19991104	BB2	28.60	9.00	29.70	22.97
19991104	BB2	27.99	8.99	29.69	22.96
19991104	BB2	27.38	9.00	29.66	22.94
19991104	BB2	26.67	8.99	29.65	22.93
19991104	BB2	26.06	8.99	29.65	22.93
19991104	BB2	25.45	8.98	29.60	22.89
19991104	BB2	24.72	8.98	29.61	22.90
19991104	BB2	24.02	8.99	29.57	22.87
19991104	BB2	23.44	8.99	29.56	22.86
19991104	BB2	22.74	9.00	29.53	22.84
19991104	BB2	22.10	8.99	29.54	22.85
19991104	BB2	21.30	9.02	29.43	22.76
19991104	BB2	20.66	9.04	29.40	22.73
19991104	BB2	19.99	9.04	29.41	22.74
19991104	BB2	19.41	9.05	29.39	22.72
19991104	BB2	18.71	9.06	29.39	22.72
19991104	BB2	18.01	9.06	29.38	22.71
19991104	BB2	17.46	9.08	29.37	22.70
19991104	BB2	16.82	9.09	29.35	22.69
19991104	BB2	16.08	9.13	29.33	22.66
19991104	BB2	15.47	9.16	29.30	22.63
19991104	BB2	14.68	9.15	29.27	22.61
19991104	BB2	14.13	9.17	29.22	22.57
19991104	BB2	13.43	9.19	29.18	22.53
19991104	BB2	12.76	9.23	29.15	22.51
19991104	BB2	12.09	9.33	29.09	22.45
19991104	BB2	11.41	9.37	29.02	22.39
19991104	BB2	10.83	9.37	29.02	22.39
19991104	BB2	10.10	9.38	29.00	22.37
19991104	BB2	9.46	9.38	29.00	22.37
19991104	BB2	8.82	9.43	28.92	22.30
19991104	BB2	8.15	9.44	28.84	22.24
19991104	BB2	7.48	9.43	28.86	22.25
19991104	BB2	6.84	9.44	28.84	22.24
19991104	BB2	6.04	9.43	28.84	22.24
19991104	BB2	5.40	9.46	28.67	22.10
19991104	BB2	4.85	8.90	28.89	22.35

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB2	4.00	8.60	25.43	19.69
19991104	BB2	3.48	8.59	25.36	19.64
19991104	BB2	2.59	8.49	25.17	19.50
19991104	BB2	2.11	8.52	25.03	19.39
19991104	BB2	1.37	8.48	24.88	19.27
19991104	BB2	0.70	8.42	24.83	19.24
19991104	BB2	0.24	8.42	24.76	19.19
19991104	BB2	0.00	8.37	24.70	19.15
19991104	BB3	9.25	9.38	28.96	22.33
19991104	BB3	9.13	9.39	28.96	22.34
19991104	BB3	8.82	9.39	28.95	22.33
19991104	BB3	8.79	9.41	28.94	22.32
19991104	BB3	8.39	9.34	28.92	22.31
19991104	BB3	7.94	9.37	28.86	22.26
19991104	BB3	7.45	9.35	28.87	22.27
19991104	BB3	6.90	9.37	28.86	22.26
19991104	BB3	6.35	9.32	28.75	22.18
19991104	BB3	5.95	9.25	28.66	22.12
19991104	BB3	5.46	9.16	28.64	22.12
19991104	BB3	4.98	9.09	28.17	21.76
19991104	BB3	4.55	8.71	27.56	21.34
19991104	BB3	4.00	8.66	25.35	19.62
19991104	BB3	3.63	8.59	25.08	19.42
19991104	BB3	2.99	8.54	24.88	19.27
19991104	BB3	2.59	8.53	24.85	19.25
19991104	BB3	2.11	8.51	24.82	19.23
19991104	BB3	1.62	8.51	24.82	19.23
19991104	BB3	1.16	8.47	24.77	19.19
19991104	BB3	0.82	8.47	24.76	19.19
19991104	BB3	0.61	8.47	24.75	19.18
19991104	BB3	0.43	8.46	24.77	19.19
19991104	BB3	0.31	8.47	24.76	19.19
19991104	BB3	0.09	8.45	24.75	19.18
19991104	BB3	0.00	8.44	24.55	19.02
19991104	BB4	10.04	9.32	29.04	22.41
19991104	BB4	9.61	9.32	29.07	22.43
19991104	BB4	9.37	9.32	29.05	22.42
19991104	BB4	8.94	9.32	29.07	22.43
19991104	BB4	8.58	9.37	29.00	22.37
19991104	BB4	8.27	9.39	29.00	22.36
19991104	BB4	7.87	9.40	28.99	22.35
19991104	BB4	7.54	9.35	28.94	22.32
19991104	BB4	7.17	9.28	28.93	22.33
19991104	BB4	6.81	9.29	28.80	22.22
19991104	BB4	6.47	9.28	28.82	22.24
19991104	BB4	6.04	9.26	28.81	22.24
19991104	BB4	5.77	9.25	28.81	22.24

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB4	5.40	9.23	28.75	22.19
19991104	BB4	4.98	8.92	28.04	21.68
19991104	BB4	4.61	8.50	26.21	20.31
19991104	BB4	4.30	8.64	25.23	19.53
19991104	BB4	3.94	8.58	25.24	19.55
19991104	BB4	3.60	8.53	25.29	19.59
19991104	BB4	3.14	8.52	25.32	19.62
19991104	BB4	2.90	8.52	24.89	19.28
19991104	BB4	2.50	8.50	24.88	19.27
19991104	BB4	2.20	8.48	24.85	19.25
19991104	BB4	1.89	8.48	24.85	19.25
19991104	BB4	1.43	8.47	24.82	19.23
19991104	BB4	1.13	8.44	24.80	19.22
19991104	BB4	0.64	8.43	24.78	19.21
19991104	BB4	0.40	8.42	24.78	19.20
19991104	BB4	0.03	8.42	24.78	19.21
19991104	BB4	0.00	8.40	24.76	19.19
19991104	BB5	19.38	9.04	29.42	22.75
19991104	BB5	19.35	9.03	29.42	22.75
19991104	BB5	19.23	9.05	29.39	22.72
19991104	BB5	18.92	9.05	29.39	22.72
19991104	BB5	18.62	9.06	29.38	22.71
19991104	BB5	18.16	9.08	29.37	22.70
19991104	BB5	17.76	9.08	29.36	22.69
19991104	BB5	17.31	9.08	29.38	22.71
19991104	BB5	17.00	9.07	29.35	22.69
19991104	BB5	16.51	9.08	29.35	22.69
19991104	BB5	16.21	9.08	29.35	22.68
19991104	BB5	15.69	9.09	29.35	22.68
19991104	BB5	15.32	9.10	29.34	22.67
19991104	BB5	14.99	9.11	29.32	22.66
19991104	BB5	14.50	9.10	29.35	22.68
19991104	BB5	14.16	9.11	29.32	22.66
19991104	BB5	13.76	9.11	29.33	22.67
19991104	BB5	13.28	9.15	29.27	22.61
19991104	BB5	12.91	9.25	29.09	22.46
19991104	BB5	12.51	9.34	29.04	22.40
19991104	BB5	12.09	9.35	29.01	22.38
19991104	BB5	11.72	9.37	29.01	22.38
19991104	BB5	11.20	9.37	29.00	22.37
19991104	BB5	10.93	9.38	28.99	22.36
19991104	BB5	10.44	9.40	28.98	22.35
19991104	BB5	10.10	9.39	28.99	22.36
19991104	BB5	9.68	9.41	28.97	22.34
19991104	BB5	9.25	9.41	28.98	22.34
19991104	BB5	8.88	9.42	28.97	22.34
19991104	BB5	8.52	9.43	28.94	22.31

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB5	8.06	9.45	28.95	22.32
19991104	BB5	7.66	9.45	28.92	22.30
19991104	BB5	7.20	9.42	28.92	22.30
19991104	BB5	6.93	9.43	28.63	22.07
19991104	BB5	6.62	9.43	28.58	22.03
19991104	BB5	6.20	9.46	28.55	22.00
19991104	BB5	5.71	9.48	28.45	21.92
19991104	BB5	5.34	9.45	28.04	21.61
19991104	BB5	4.94	9.19	28.01	21.62
19991104	BB5	4.52	8.82	27.11	20.97
19991104	BB5	4.00	8.65	25.68	19.88
19991104	BB5	3.63	8.61	25.32	19.60
19991104	BB5	3.24	8.60	25.30	19.59
19991104	BB5	2.78	8.58	25.27	19.57
19991104	BB5	2.44	8.58	25.24	19.54
19991104	BB5	1.92	8.60	25.22	19.53
19991104	BB5	1.68	8.62	25.10	19.43
19991104	BB5	1.31	8.59	25.09	19.43
19991104	BB5	0.92	8.49	24.96	19.34
19991104	BB5	0.46	8.49	24.82	19.23
19991104	BB5	0.06	8.50	24.81	19.22
19991104	BB5	0.00	8.42	24.81	19.23
19991104	BB7	50.20	9.33	30.00	23.16
19991104	BB7	50.02	9.34	29.99	23.15
19991104	BB7	49.66	9.33	30.00	23.16
19991104	BB7	49.11	9.33	30.00	23.16
19991104	BB7	48.80	9.32	29.99	23.15
19991104	BB7	48.25	9.32	29.99	23.15
19991104	BB7	47.76	9.32	29.97	23.14
19991104	BB7	47.37	9.31	29.98	23.14
19991104	BB7	46.73	9.30	29.98	23.15
19991104	BB7	46.08	9.29	29.97	23.14
19991104	BB7	45.69	9.28	29.97	23.14
19991104	BB7	45.14	9.27	29.96	23.14
19991104	BB7	44.62	9.27	29.95	23.13
19991104	BB7	44.16	9.28	29.96	23.13
19991104	BB7	43.58	9.27	29.96	23.14
19991104	BB7	43.15	9.27	29.94	23.12
19991104	BB7	42.73	9.26	29.95	23.13
19991104	BB7	42.33	9.25	29.95	23.13
19991104	BB7	41.84	9.24	29.93	23.11
19991104	BB7	41.26	9.23	29.94	23.12
19991104	BB7	40.74	9.24	29.91	23.10
19991104	BB7	40.26	9.25	29.92	23.11
19991104	BB7	39.77	9.25	29.91	23.10
19991104	BB7	39.28	9.25	29.91	23.10
19991104	BB7	38.76	9.23	29.90	23.10

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB7	38.12	9.23	29.90	23.10
19991104	BB7	37.69	9.22	29.91	23.10
19991104	BB7	37.05	9.20	29.86	23.07
19991104	BB7	36.59	9.17	29.87	23.08
19991104	BB7	36.07	9.17	29.86	23.07
19991104	BB7	35.68	9.16	29.86	23.07
19991104	BB7	35.13	9.16	29.86	23.08
19991104	BB7	34.70	9.16	29.87	23.08
19991104	BB7	34.21	9.14	29.84	23.06
19991104	BB7	33.66	9.14	29.84	23.06
19991104	BB7	33.18	9.15	29.83	23.05
19991104	BB7	32.69	9.14	29.83	23.05
19991104	BB7	32.11	9.14	29.82	23.05
19991104	BB7	31.56	9.07	29.83	23.06
19991104	BB7	31.25	9.05	29.75	23.00
19991104	BB7	31.25	9.02	29.76	23.02
19991104	BB7	30.12	9.03	29.74	23.00
19991104	BB7	29.70	9.03	29.74	23.00
19991104	BB7	29.09	9.03	29.73	22.99
19991104	BB7	28.72	9.01	29.74	23.00
19991104	BB7	28.14	9.01	29.70	22.97
19991104	BB7	27.68	9.01	29.70	22.97
19991104	BB7	27.25	9.00	29.70	22.97
19991104	BB7	26.67	8.99	29.69	22.97
19991104	BB7	26.16	9.00	29.68	22.95
19991104	BB7	25.64	9.00	29.65	22.93
19991104	BB7	25.12	9.00	29.64	22.93
19991104	BB7	24.60	8.98	29.58	22.88
19991104	BB7	24.11	8.99	29.58	22.88
19991104	BB7	23.59	8.99	29.56	22.86
19991104	BB7	23.13	9.01	29.56	22.86
19991104	BB7	22.58	8.98	29.55	22.86
19991104	BB7	22.22	8.98	29.48	22.80
19991104	BB7	21.64	8.98	29.48	22.80
19991104	BB7	21.06	8.99	29.45	22.78
19991104	BB7	20.54	8.99	29.47	22.79
19991104	BB7	19.99	9.01	29.42	22.75
19991104	BB7	19.50	9.02	29.41	22.74
19991104	BB7	19.04	9.03	29.41	22.74
19991104	BB7	18.43	9.04	29.40	22.73
19991104	BB7	17.88	9.06	29.40	22.73
19991104	BB7	17.43	9.08	29.37	22.70
19991104	BB7	17.03	9.09	29.38	22.71
19991104	BB7	16.33	9.12	29.33	22.67
19991104	BB7	15.84	9.13	29.33	22.66
19991104	BB7	15.17	9.12	29.29	22.63
19991104	BB7	14.74	9.16	29.25	22.60
19991104	BB7	14.25	9.17	29.21	22.57

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB7	13.73	9.18	29.21	22.56
19991104	BB7	13.15	9.20	29.22	22.57
19991104	BB7	12.57	9.24	29.18	22.53
19991104	BB7	12.09	9.27	29.17	22.51
19991104	BB7	11.72	9.31	29.06	22.42
19991104	BB7	11.17	9.32	29.06	22.42
19991104	BB7	10.53	9.34	29.00	22.38
19991104	BB7	10.10	9.37	28.96	22.34
19991104	BB7	9.49	9.39	28.90	22.29
19991104	BB7	9.00	9.42	28.87	22.26
19991104	BB7	8.64	9.44	28.87	22.25
19991104	BB7	7.91	9.44	28.84	22.23
19991104	BB7	7.33	9.44	28.84	22.23
19991104	BB7	6.90	9.45	28.77	22.18
19991104	BB7	6.35	9.46	28.69	22.12
19991104	BB7	5.80	9.46	28.61	22.05
19991104	BB7	5.28	9.48	28.59	22.03
19991104	BB7	4.70	9.37	28.41	21.91
19991104	BB7	4.18	8.59	26.20	20.29
19991104	BB7	3.63	8.53	25.94	20.10
19991104	BB7	3.11	8.50	25.29	19.59
19991104	BB7	2.59	8.56	25.15	19.47
19991104	BB7	1.98	8.53	24.95	19.33
19991104	BB7	1.50	8.53	24.87	19.27
19991104	BB7	1.07	8.47	24.88	19.28
19991104	BB7	0.46	8.37	24.77	19.20
19991104	BB7	0.09	8.36	24.71	19.16
19991104	BB7	0.00	8.31	24.76	19.21
19991104	BB8	49.66	9.30	29.99	23.15
19991104	BB8	49.47	9.30	29.97	23.14
19991104	BB8	49.11	9.29	29.99	23.15
19991104	BB8	48.59	9.29	29.98	23.14
19991104	BB8	48.13	9.29	29.98	23.15
19991104	BB8	47.67	9.29	29.97	23.14
19991104	BB8	47.21	9.29	29.97	23.14
19991104	BB8	46.66	9.28	29.97	23.14
19991104	BB8	46.05	9.27	29.95	23.13
19991104	BB8	45.69	9.26	29.96	23.14
19991104	BB8	45.14	9.25	29.95	23.13
19991104	BB8	44.77	9.24	29.94	23.13
19991104	BB8	44.31	9.24	29.92	23.11
19991104	BB8	43.73	9.23	29.93	23.12
19991104	BB8	43.25	9.23	29.93	23.12
19991104	BB8	42.82	9.23	29.92	23.11
19991104	BB8	42.45	9.24	29.93	23.11
19991104	BB8	41.96	9.25	29.92	23.11
19991104	BB8	41.32	9.23	29.94	23.12

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB8	40.87	9.26	29.91	23.09
19991104	BB8	40.47	9.25	29.92	23.11
19991104	BB8	40.01	9.23	29.93	23.12
19991104	BB8	39.52	9.20	29.89	23.09
19991104	BB8	39.10	9.17	29.89	23.10
19991104	BB8	38.49	9.16	29.88	23.08
19991104	BB8	38.12	9.16	29.89	23.10
19991104	BB8	37.69	9.16	29.87	23.08
19991104	BB8	37.23	9.15	29.87	23.08
19991104	BB8	36.72	9.15	29.87	23.08
19991104	BB8	36.20	9.14	29.86	23.08
19991104	BB8	35.74	9.13	29.85	23.07
19991104	BB8	35.28	9.12	29.85	23.07
19991104	BB8	34.73	9.12	29.85	23.07
19991104	BB8	34.24	9.12	29.84	23.06
19991104	BB8	33.72	9.12	29.84	23.06
19991104	BB8	33.18	9.09	29.85	23.08
19991104	BB8	32.78	9.08	29.82	23.05
19991104	BB8	32.20	9.07	29.80	23.04
19991104	BB8	31.77	9.07	29.80	23.04
19991104	BB8	31.22	9.06	29.81	23.05
19991104	BB8	30.79	9.04	29.78	23.03
19991104	BB8	30.28	9.04	29.78	23.03
19991104	BB8	29.79	9.04	29.77	23.02
19991104	BB8	29.30	9.02	29.74	23.00
19991104	BB8	28.78	9.01	29.72	22.99
19991104	BB8	28.29	9.00	29.70	22.97
19991104	BB8	27.77	8.98	29.69	22.97
19991104	BB8	27.32	8.97	29.64	22.93
19991104	BB8	26.86	8.95	29.64	22.93
19991104	BB8	26.31	8.99	29.60	22.90
19991104	BB8	25.73	8.99	29.61	22.91
19991104	BB8	25.27	8.97	29.61	22.90
19991104	BB8	24.81	8.98	29.59	22.89
19991104	BB8	24.36	8.96	29.60	22.90
19991104	BB8	23.74	8.98	29.55	22.86
19991104	BB8	23.47	8.99	29.55	22.86
19991104	BB8	22.86	9.00	29.53	22.84
19991104	BB8	22.46	9.00	29.53	22.84
19991104	BB8	22.01	8.99	29.46	22.78
19991104	BB8	21.49	8.98	29.45	22.78
19991104	BB8	21.09	8.99	29.47	22.79
19991104	BB8	20.48	8.99	29.44	22.77
19991104	BB8	20.08	8.99	29.45	22.78
19991104	BB8	19.44	9.01	29.41	22.74
19991104	BB8	18.92	9.02	29.41	22.74
19991104	BB8	18.40	9.03	29.40	22.73
19991104	BB8	18.04	9.08	29.37	22.70

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB8	17.46	9.09	29.37	22.70
19991104	BB8	16.97	9.11	29.34	22.68
19991104	BB8	16.39	9.14	29.32	22.65
19991104	BB8	15.90	9.15	29.30	22.64
19991104	BB8	15.47	9.16	29.30	22.64
19991104	BB8	14.89	9.15	29.28	22.62
19991104	BB8	14.38	9.16	29.27	22.62
19991104	BB8	13.86	9.22	29.21	22.55
19991104	BB8	13.31	9.26	29.20	22.54
19991104	BB8	12.79	9.27	29.19	22.53
19991104	BB8	12.30	9.29	29.12	22.48
19991104	BB8	11.81	9.33	29.10	22.45
19991104	BB8	11.26	9.33	29.08	22.44
19991104	BB8	10.83	9.34	29.09	22.44
19991104	BB8	10.29	9.35	29.07	22.43
19991104	BB8	9.80	9.36	29.05	22.41
19991104	BB8	9.31	9.38	29.01	22.37
19991104	BB8	8.94	9.41	28.96	22.33
19991104	BB8	8.52	9.42	28.87	22.26
19991104	BB8	7.78	9.43	28.79	22.20
19991104	BB8	7.39	9.43	28.77	22.18
19991104	BB8	6.84	9.42	28.70	22.13
19991104	BB8	6.44	9.43	28.63	22.07
19991104	BB8	5.95	9.43	28.61	22.06
19991104	BB8	5.40	9.43	28.60	22.05
19991104	BB8	4.94	9.43	28.59	22.04
19991104	BB8	4.36	8.70	26.03	20.15
19991104	BB8	3.88	8.59	25.29	19.59
19991104	BB8	3.39	8.59	25.41	19.68
19991104	BB8	2.84	8.58	25.38	19.66
19991104	BB8	2.32	8.54	25.29	19.59
19991104	BB8	1.83	8.45	25.04	19.41
19991104	BB8	1.16	8.37	24.71	19.16
19991104	BB8	0.79	8.35	24.68	19.14
19991104	BB8	0.15	8.34	24.69	19.14
19991104	BB8	0.00	8.34	24.67	19.13
19991104	BB9	49.78	9.34	30.01	23.17
19991104	BB9	49.75	9.34	30.03	23.18
19991104	BB9	49.26	9.35	30.02	23.17
19991104	BB9	48.68	9.34	30.04	23.19
19991104	BB9	48.01	9.33	30.00	23.16
19991104	BB9	47.43	9.33	30.02	23.17
19991104	BB9	46.73	9.31	30.00	23.16
19991104	BB9	46.24	9.31	30.01	23.16
19991104	BB9	45.50	9.32	30.01	23.17
19991104	BB9	44.99	9.29	30.00	23.16
19991104	BB9	44.41	9.28	30.00	23.17

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB9	43.73	9.28	29.97	23.14
19991104	BB9	43.15	9.27	29.98	23.15
19991104	BB9	42.51	9.26	29.96	23.13
19991104	BB9	41.93	9.25	29.96	23.14
19991104	BB9	41.35	9.26	29.96	23.13
19991104	BB9	40.80	9.25	29.96	23.14
19991104	BB9	40.19	9.23	29.95	23.13
19991104	BB9	39.49	9.22	29.95	23.13
19991104	BB9	38.82	9.20	29.93	23.12
19991104	BB9	38.27	9.21	29.92	23.11
19991104	BB9	37.78	9.24	29.93	23.12
19991104	BB9	37.08	9.23	29.94	23.12
19991104	BB9	36.53	9.22	29.91	23.11
19991104	BB9	35.86	9.22	29.92	23.11
19991104	BB9	35.31	9.16	29.92	23.12
19991104	BB9	34.70	9.15	29.88	23.09
19991104	BB9	33.97	9.15	29.89	23.09
19991104	BB9	33.36	9.14	29.88	23.09
19991104	BB9	32.81	9.15	29.88	23.09
19991104	BB9	32.20	9.15	29.86	23.07
19991104	BB9	31.68	9.13	29.87	23.09
19991104	BB9	31.25	9.12	29.85	23.07
19991104	BB9	31.25	9.07	29.85	23.08
19991104	BB9	29.85	9.05	29.81	23.05
19991104	BB9	29.18	9.03	29.80	23.05
19991104	BB9	28.54	9.03	29.76	23.02
19991104	BB9	27.99	9.02	29.75	23.01
19991104	BB9	27.35	9.02	29.75	23.01
19991104	BB9	26.74	9.02	29.73	22.99
19991104	BB9	26.06	9.00	29.73	22.99
19991104	BB9	25.42	8.99	29.71	22.98
19991104	BB9	24.84	9.00	29.70	22.97
19991104	BB9	24.11	8.97	29.70	22.97
19991104	BB9	23.44	8.98	29.65	22.94
19991104	BB9	22.74	8.98	29.61	22.91
19991104	BB9	22.16	8.97	29.59	22.89
19991104	BB9	21.61	8.98	29.57	22.87
19991104	BB9	20.88	8.99	29.54	22.85
19991104	BB9	20.36	8.98	29.50	22.82
19991104	BB9	19.66	8.99	29.47	22.79
19991104	BB9	19.04	9.02	29.44	22.76
19991104	BB9	18.46	9.02	29.46	22.78
19991104	BB9	17.79	9.01	29.44	22.77
19991104	BB9	17.18	9.05	29.42	22.74
19991104	BB9	16.51	9.10	29.39	22.71
19991104	BB9	15.87	9.14	29.36	22.69
19991104	BB9	15.23	9.14	29.35	22.67
19991104	BB9	14.59	9.14	29.33	22.66

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	BB9	13.86	9.16	29.33	22.66
19991104	BB9	13.37	9.19	29.25	22.59
19991104	BB9	12.73	9.20	29.23	22.57
19991104	BB9	12.06	9.27	29.16	22.51
19991104	BB9	11.41	9.29	29.12	22.48
19991104	BB9	10.77	9.30	29.14	22.49
19991104	BB9	10.19	9.34	29.03	22.40
19991104	BB9	9.55	9.40	28.93	22.31
19991104	BB9	8.94	9.40	28.82	22.23
19991104	BB9	8.21	9.40	28.80	22.21
19991104	BB9	7.72	9.40	28.79	22.20
19991104	BB9	6.93	9.41	28.79	22.20
19991104	BB9	6.29	9.42	28.77	22.19
19991104	BB9	5.62	9.43	28.69	22.12
19991104	BB9	5.04	9.45	28.60	22.04
19991104	BB9	4.49	9.04	28.54	22.06
19991104	BB9	3.75	8.52	25.38	19.66
19991104	BB9	3.21	8.64	25.12	19.44
19991104	BB9	2.53	8.59	24.95	19.32
19991104	BB9	1.80	8.49	24.91	19.30
19991104	BB9	1.13	8.42	24.80	19.22
19991104	BB9	0.64	8.43	24.81	19.23
19991104	BB9	0.28	8.41	24.76	19.19
19991104	BB9	0.00	8.35	24.70	19.15
19991104	FC1	19.72	9.22	29.37	22.68
19991104	FC1	19.50	9.21	29.42	22.72
19991104	FC1	19.29	9.21	29.41	22.71
19991104	FC1	19.08	9.22	29.42	22.72
19991104	FC1	18.53	9.24	29.36	22.67
19991104	FC1	18.01	9.25	29.33	22.65
19991104	FC1	17.73	9.25	29.33	22.65
19991104	FC1	17.12	9.25	29.25	22.59
19991104	FC1	16.88	9.25	29.27	22.60
19991104	FC1	16.51	9.26	29.23	22.56
19991104	FC1	15.90	9.29	29.10	22.46
19991104	FC1	15.72	9.32	29.06	22.42
19991104	FC1	15.08	9.34	29.02	22.39
19991104	FC1	14.86	9.36	29.02	22.39
19991104	FC1	14.25	9.40	28.95	22.33
19991104	FC1	13.83	9.39	28.92	22.30
19991104	FC1	13.28	9.40	28.83	22.23
19991104	FC1	13.00	9.44	28.70	22.13
19991104	FC1	12.61	9.46	28.63	22.07
19991104	FC1	12.06	9.47	28.55	22.00
19991104	FC1	11.78	9.48	28.54	21.99
19991104	FC1	11.08	9.50	28.41	21.89
19991104	FC1	10.90	9.50	28.43	21.91

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	FC1	10.22	9.49	28.37	21.86
19991104	FC1	9.95	9.50	28.37	21.86
19991104	FC1	9.64	9.51	28.35	21.84
19991104	FC1	9.13	9.48	28.23	21.76
19991104	FC1	8.79	9.47	28.20	21.73
19991104	FC1	8.15	9.43	28.08	21.64
19991104	FC1	7.87	9.44	27.88	21.48
19991104	FC1	7.29	9.38	27.58	21.26
19991104	FC1	6.99	9.37	27.59	21.27
19991104	FC1	6.59	9.37	27.53	21.22
19991104	FC1	6.17	9.46	27.25	20.99
19991104	FC1	5.71	9.58	27.10	20.85
19991104	FC1	5.25	9.54	26.78	20.61
19991104	FC1	4.88	9.36	26.54	20.45
19991104	FC1	4.46	9.33	26.36	20.31
19991104	FC1	4.00	9.31	26.33	20.29
19991104	FC1	3.57	9.26	26.29	20.27
19991104	FC1	3.02	9.04	26.29	20.30
19991104	FC1	2.75	8.96	25.97	20.06
19991104	FC1	2.17	8.91	25.86	19.98
19991104	FC1	1.92	8.91	25.80	19.93
19991104	FC1	1.28	8.91	25.73	19.88
19991104	FC1	1.22	8.90	25.74	19.89
19991104	FC1	0.34	8.88	25.73	19.89
19991104	FC1	0.21	8.69	25.79	19.96
19991104	FC1	0.00	8.64	25.19	19.50
19991104	FC2	19.29	9.22	29.46	22.75
19991104	FC2	19.08	9.21	29.47	22.76
19991104	FC2	18.83	9.21	29.45	22.75
19991104	FC2	18.19	9.23	29.37	22.68
19991104	FC2	17.85	9.23	29.35	22.66
19991104	FC2	17.40	9.24	29.34	22.65
19991104	FC2	16.94	9.27	29.24	22.58
19991104	FC2	16.60	9.27	29.18	22.52
19991104	FC2	16.21	9.31	29.10	22.46
19991104	FC2	15.81	9.31	29.06	22.43
19991104	FC2	15.41	9.32	29.05	22.41
19991104	FC2	14.92	9.36	28.91	22.30
19991104	FC2	14.53	9.38	28.93	22.31
19991104	FC2	13.86	9.40	28.79	22.20
19991104	FC2	13.73	9.41	28.78	22.19
19991104	FC2	13.12	9.42	28.68	22.11
19991104	FC2	12.67	9.44	28.66	22.09
19991104	FC2	12.24	9.45	28.63	22.07
19991104	FC2	11.81	9.47	28.56	22.01
19991104	FC2	11.38	9.48	28.53	21.99
19991104	FC2	10.96	9.48	28.44	21.91

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	FC2	10.53	9.48	28.41	21.89
19991104	FC2	10.10	9.50	28.39	21.87
19991104	FC2	9.68	9.50	28.35	21.84
19991104	FC2	9.34	9.50	28.30	21.80
19991104	FC2	8.91	9.49	28.29	21.80
19991104	FC2	8.55	9.47	28.20	21.73
19991104	FC2	8.18	9.48	28.13	21.68
19991104	FC2	7.81	9.44	28.03	21.60
19991104	FC2	7.29	9.42	27.94	21.53
19991104	FC2	7.05	9.39	27.84	21.46
19991104	FC2	6.50	9.44	27.42	21.13
19991104	FC2	6.20	9.45	27.27	21.01
19991104	FC2	5.68	9.58	27.14	20.89
19991104	FC2	5.34	9.51	26.92	20.73
19991104	FC2	4.91	9.32	26.64	20.53
19991104	FC2	4.40	9.30	26.45	20.39
19991104	FC2	3.88	9.23	26.21	20.21
19991104	FC2	3.57	9.03	26.10	20.16
19991104	FC2	3.14	8.99	25.94	20.04
19991104	FC2	2.66	8.91	25.81	19.95
19991104	FC2	2.26	8.91	25.76	19.91
19991104	FC2	1.80	8.78	25.94	20.07
19991104	FC2	1.43	8.71	25.57	19.79
19991104	FC2	1.07	8.52	25.87	20.05
19991104	FC2	0.46	8.38	25.21	19.55
19991104	FC2	0.15	8.23	25.18	19.54
19991104	FC2	0.00	8.22	25.12	19.50
19991104	FC3	18.65	9.23	29.37	22.68
19991104	FC3	18.46	9.23	29.39	22.70
19991104	FC3	18.40	9.23	29.36	22.67
19991104	FC3	18.04	9.23	29.37	22.68
19991104	FC3	17.73	9.25	29.35	22.66
19991104	FC3	17.37	9.24	29.35	22.66
19991104	FC3	17.21	9.25	29.33	22.64
19991104	FC3	16.79	9.25	29.33	22.65
19991104	FC3	16.45	9.26	29.32	22.64
19991104	FC3	16.02	9.26	29.26	22.59
19991104	FC3	15.60	9.31	29.21	22.54
19991104	FC3	15.53	9.30	29.20	22.54
19991104	FC3	14.96	9.32	29.10	22.45
19991104	FC3	14.99	9.31	29.11	22.47
19991104	FC3	14.31	9.37	28.99	22.36
19991104	FC3	14.34	9.34	29.01	22.38
19991104	FC3	13.58	9.45	28.78	22.19
19991104	FC3	13.61	9.45	28.79	22.20
19991104	FC3	12.97	9.45	28.76	22.17
19991104	FC3	12.79	9.49	28.71	22.13

Date (yyyymmdd)	Site	Depth (m)	Temp (°C)	Salinity (psu)	Density (kg m^{-3})
19991104	FC3	12.51	9.49	28.69	22.11
19991104	FC3	12.06	9.49	28.63	22.07
19991104	FC3	11.81	9.49	28.65	22.08
19991104	FC3	11.51	9.48	28.62	22.05
19991104	FC3	10.90	9.48	28.57	22.02
19991104	FC3	10.93	9.48	28.55	22.00
19991104	FC3	10.22	9.47	28.50	21.96
19991104	FC3	10.13	9.47	28.47	21.94
19991104	FC3	9.58	9.48	28.37	21.86
19991104	FC3	9.25	9.47	28.40	21.88
19991104	FC3	8.85	9.50	28.30	21.80
19991104	FC3	8.55	9.47	28.31	21.82
19991104	FC3	8.33	9.41	28.25	21.78
19991104	FC3	7.84	9.40	27.92	21.53
19991104	FC3	7.66	9.41	27.88	21.49
19991104	FC3	7.23	9.47	27.79	21.41
19991104	FC3	7.02	9.40	27.75	21.39
19991104	FC3	6.65	9.34	27.63	21.31
19991104	FC3	6.35	9.35	27.54	21.23
19991104	FC3	6.04	9.35	27.51	21.21
19991104	FC3	5.71	9.39	27.35	21.08
19991104	FC3	5.52	9.47	27.17	20.93
19991104	FC3	5.13	9.36	27.02	20.82
19991104	FC3	4.67	9.48	26.88	20.70
19991104	FC3	4.67	9.44	26.93	20.74
19991104	FC3	3.97	9.54	26.84	20.66
19991104	FC3	3.85	9.39	26.83	20.67
19991104	FC3	3.33	9.32	26.38	20.33
19991104	FC3	3.08	9.20	26.30	20.29
19991104	FC3	2.90	9.18	26.16	20.18
19991104	FC3	2.50	9.20	26.13	20.16
19991104	FC3	2.23	9.13	26.16	20.19
19991104	FC3	1.86	9.04	26.13	20.17
19991104	FC3	1.68	8.98	25.99	20.08
19991104	FC3	1.28	8.99	25.92	20.02
19991104	FC3	0.92	8.94	25.83	19.96
19991104	FC3	0.67	8.91	25.85	19.98
19991104	FC3	0.09	8.80	25.69	19.87
19991104	FC3	0.15	8.78	25.65	19.84
19991104	FC3	0.00	8.42	24.87	19.28